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Partner for Solutions

Chemical Resistance List

Important Information – Please read completely!

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This document is only intended as an orientation aid for material selection and is not binding. No guarantee can be given that the resistance indicated here generally applies to each individual application. Moreover, this document does not give an assurance of particular material properties.

General Information on the Chemical Resistance of Materials

Plastics are ideal materials for the construction of pipework and are often superior to metals with regard to their material properties and costs. However, it is important to select the materials carefully in order to avoid material failure that can lead to costs and present a safety risk, in particular, in the case of aggressive media. As pressure/temperature curves are generally determined for the medium water, additional consideration should be given to the chemical resistance at the operating temperature of the application. This resistance list listing the chemical resistance of the thermoplastics, elastomers and bearing materials contained in our product range to a large number of media, is intended as a decision-making aid for selecting the materials. The degree of chemical resistance is classified in our list as follows:

+ = „resistant“:
The material is generally assessed as suitable.

0 = „conditionally resistant“:
The material is subject to attack by the medium. However, the material may be used under certain limited conditions. It is advisable to carry out more extensive tests.

- = „ non-resistant“:
The material is generally assessed as unsuitable.

not specified:
The material has not been tested with the medium at the specified temperature.

The resistance of materials to mixtures of chemicals may differ from their resistance to the pure media. Discolorations which are caused by some media, but have no effect on the physical properties of the materials, are not included in this list.

The question regarding the chemical resistance of a material with the specification “resistant”, “conditionally resistant” or “non-resistant” seems simple at first glance. However, answering this question involves the consideration of complicated interrelations that have not yet been completely clarified to date. That does not mean that plastics engineers do not have access to a large number of reliable values with regard to the resistance of plastics and cannot make good predications on the resistance. However, it does mean that there is always a certain element of uncertainty. This resistance guide is based on our own laboratory trials and our practical experience over the years.

However, the resistance specifications cannot be applied to all possible operating conditions without taking further factors into consideration.

For example, a general resistance list can hardly take the phenomenon of stress crack corrosion for each application into consideration. Furthermore, the type and amount of additives such as plasticizers, fillers and stabilizers have a considerable influence on the resistance of materials. This applies particularly to elastomers, whose properties are determined not only by the base material but also by the other recipe ingridients and the curing parameters. In the case of thermoplastic materials such as PVC, the type and proportion of the impact resistance modifier can lead to different degrees of resistance. This occurs especially in cases of highly concentrated contact fluids and can often only be detected with regard to long-term behaviour.

In addition to the chemical resistance of the materials used, the constructional details also influence the suitability of the finished product. PTFE, for example, is resistant to virtually all media, even at higher temperatures. Nevertheless, some media, particularly at higher pressures, are able to diffuse through PTFE layers (permeation). This must be taken into consideration for PTFE coated elastomer diaphragms.

Partly we offer product variants with an additional permeation-stopping foil (PFA or ECTFE).

Therefore, the resistance list cannot replace conducting your own practical tests.

Controlled individual tests must be performed on safety components subject to high stress, in particular, to reliably prove their suitability. Creep tests conducted for at least thousand hours or comparison of short-term tensile strength before and after the preselected chemical contact at the respective necessary temperature are suitable methods for determining suitability.

Structure and Usage of this List

This is followed on the next pages:

- properties of selected materials
- list of media
- list of chemical resistances

Since diffrent, synonymous names are common for many media, the ASV resistance list is sorted by four-digit media numbers, which can be found in the list of media. Mixed acids are precisely defined in our resistance list by the mass content (percentage) of acids related to the hole mixture. Within a name the acid components are sorted by decreasing mass content.

Legal Notes

This resistance list is an excerpt from a ASV-database, which is subject to continuous data maintenance. It is compiled to the best of our knowledge and based on our experience and our current knowledge. Publication of this list or excerpts there of are not permitted without the prior express permission of ASV Stübbe. In the event of a violation of this copyright we reserve the right to take legal action.

Properties of Selected Materials

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This table only gives a simplified general overview. The product specific application limits stated in our data sheets must be kept in.

Material	Properties	Temperature	
		min.	max.
polyvinyl chloride PVC-U, rigid PVC (non-plasticized)	Hard, rigid thermoplastic. Thermally less stressable. The material itself is notch impact sensitive, types with enhanced impact strength show good mechanical properties. Generally good resistance against aqueous media (salts, acids, lyes) and aliphatic hydrocarbons. Non-resistant to aromatic hydrocarbons, chlorinated hydrocarbons, ketones, ester and ether. Good weathering resistance when stabilized.	0°C	+60°C
polyvinyl chloride PVC-C (postchlorinated PVC-U)	Hard, rigid thermoplastic, similar properties as PVC-U, but thermally more stressable.	0°C	+80°C
polyethylene, high density PE-HD, PE 80/100 high molecular low pressure polyethylene	Tenacious, flexible to rigid depending on the crystallinity. Excellent electrical properties. Generally good resistance against aqueous media (salts, acids, lyes), many polar organic substances (alcohols, ketones, ester, organic acids) various oils and greases. Non-resistant to concentrated oxidizing acids, aromatic hydrocarbons, chlorinated hydrocarbons. Good weathering resistance when stabilized.	–20°C	+80°C
polypropylene PP-H (homopolymer)	Higher hardness and rigidity in comparison to PE, but poor tenacity in the cold. Therefore, the material below +5°C becomes brittle. Higher service temperature than PE. Very good electrical properties. Apart from that similar resistance as PE-HD, but higher tendency to stress-cracking corrosion by oxidizing media and lover UV resistance.	+5°C	+100°C
polypropylene PP-GF30 (homopolymer, reinforced with 30% glass fibres)	The glass fibre reinforcement leads to a higher rigidity but unfortunately also to a reduced chemical resistance against certain media (i.e. hydrofluoric acid, hydrochloric acid, lyes). Other characteristics are similar to non-reinforced PP-H.	0°C	+110°C
polyvinylidene difluoride PVDF (homopolymer)	Tenacious, rigid thermoplastic containing fluorine, with excellent mechanical, physical and thermal properties and excellent weathering resistance. Resistant to inorganic acids (also oxidizing), aliphatic and aromatic hydrocarbons, chlorine and bromine. Less resistant to alkaline solutions (danger of stress-cracking corrosion).	–30°C	+145°C

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Material	Properties	Temperature	
		min.	max.
polytetrafluoroethylene PTFE (unfilled)	Low pressure resistance, high creep tendency, low long-time steadiness. Resistant to almost all chemicals. Very good weathering resistance. Physiologically safe.	–270°C	+260°C
tetrafluoroethylene-hexafluoropropylene-copolymer FEP	Chemical resistance similar PTFE, but higher strength, lower creep tendency, transparent and diffusion-tight due to thermoplastic processability. Physiologically safe.	–200°C	+200°C
tetrafluoroethylene-perfluoroalkoxyvinylether-copolymer PFA	Chemical resistance similar PTFE, but higher strength, lower creep tendency, transparent and diffusion-tight due to thermoplastic processability. Physiologically safe.	–200°C	+260°C
polyamide PA12	Very good tenacity, high deformation resistance in the hot. Tenacious in the cold. Good abrasion strength, transparent. Generally good resistance to neutral aqueous media and aliphatic hydrocarbons. Non-resistant to acids, concentrated alkaline solutions and phenols. Weathering resistance: For outside application a protective coating is recommended.	–20°C	+100°C
polysulfone PSU	Good heat distortion resistance and hydrolytic stability. Well balanced, mechanical properties. Sensitive to stress-cracking corrosion. Transparent. Generally good resistance to aqueous media (salts, diluted acids, lyes) and aliphatic hydrocarbons. Non-resistant to ketones, esters, ethers, chlorinated and aromatic hydrocarbons. Weathering resistance: For outside application a protective coating is recommended.	–15°C	+160°C
ethylene-propylene-diene-rubber EPDM	Average mechanical properties, not oil-resistant. Resistant to hot water, steam, diluted acids, salt solutions, concentrated lyes, ketones and ozone. Non-Resistant to greases, oils, aliphatic, aromatic and halogenated hydrocarbons and fuels.	–40°C	+150°C

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Material	Properties	Temperature	
		min.	max.
acrylonitrile-butadiene-rubber NBR	Average mechanical properties, oil-resistant. Resistant to aliphatic hydrocarbons and fuels. Non-resistant to acids, concentrated lyes and oxidizing media. Low ozone and weathering resistance.	–25°C	+120°C
chlorosulfonylpolyethylene-rubber CSM	Average mechanical properties. Chemical resistance similar to that of EPDM, but conditionally oil-resistant.	–20°C	+130°C
chloroprene-rubber CR	Average mechanical properties. Conditionally oil-resistant. Chemical resistance to acids, concentrated lyes and oxidizing media is better than that of NBR, but lower than those of EPDM and CSM. Ozone and weathering resistance is better than that of NBR, but less than that of EPDM.	–40°C	+120°C
fluoro-rubber FKM (= FPM)	Moderate mechanical properties, good back force capability at higher temperatures, oil-resistant. Low cold flexibility. Good resistance to various acids and salt solutions, aliphatic hydrocarbons and oxidizing media. Only moderately resistant to lyes. Non-resistant to esters, ketones and amines. Excellent weathering resistance.	–10°C	+200°C
perfluoro-rubber FFKM	Mechanical properties are similar to those of FKM, but thermally more stressable. Best chemical resistance of all mentioned rubber types. Excellent weathering resistance.	–10°C	+260°C
Hastelloy C (alloy 2.4537)	High temperature alloy on the basis of nickel, chromium and molybdenum. Very corrosion resistant to moist chlorine, aqueous solutions of chlorine, chlorides and hypochlorites, sulfuric acid, phosphoric acid, acetic acid and formic acid.		approx. +1000°C
V2A (alloy 1.4301)	Stainless, austenitic chrom-nickel steel with good corrosion resistance.		approx. +700°C
V4A (alloy 1.4571)	Stainless, austenitic chrom-nickel steel, improved corrosion resistance in comparison to 1.4301.		approx. +700°C

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Material	Properties	Temperature	
		min.	max.
carbon	Synthetic resin bounded carbon. Good slip properties (used for bearings and bushes). Good thermal resistance. The chemical resistance is generally good, but in cases of strong, concentrated acids and oxidizing media reduced due to the carbon and/or synthetic resin.		approx. +200°C
silicon carbide (pressureless sintered) SSiC	For slip bearings and bushes used ceramic high performance material. High thermal and very universal chemical resistance.		approx. +1500°C
Al_2O_3	Oxide ceramics on the bases of aluminium oxide. Excellent resistance against most organic substances (hydrocarbons, solvents) and various aqueous and oxidizing media.		approx. +1900°C

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acetaldehyde	1014
acetamide	1015
acetanilide	1017
acetic acid	1310
acetic acid amide	1015
acetic acid amyl ester	1078
acetic acid anilide	1017
acetic acid butyl ester	1160
acetic acid ethyl ester	1317
acetic acid methyl ester	1481
acetic acid potassium salt	1386
acetic acid sodium salt	1509
acetic acid vinyl ester	1695
acetic anhydride	1016
acetone	1018
acetonitrile	1020
acetophenone	1021
acetylacetone	1022
acetylbenzene	1021
acetyl chloride	1023
acetylene	1024
acetylene tetrachloride	1670
2-acetyloxybenzoic acid	1025
acetylsalicylic acid	1025
O-acetylsalicylic acid	1025
acrylic acid butyl ester	1028
acrylic acid ethyl ester	1318
acrylonitrile	1027
adipic acid	1029
air	1461
alkanesulfonic acids (mixtures)	1031
alkyl sulfates	1332
allyl alcohol	1032
allyl chloride	1033
alum	1030
alumina	1044
aluminium acetate basic	1034
aluminium ammonium sulfate	1035
aluminium chlorate	1036
aluminium chloride	1037
aluminium fluoride	1040
aluminium fluorosilicate	1041
aluminium hydroxide	1042
aluminium iron(II) sulfate	1039
aluminium nitrate	1043
aluminium oxide	1044
aluminium sulfate	1045
aluminium trifluoride	1040
amidosulfuric acid	1657
aminoacetic acid	1051
amino acids	1052
p-aminoazobenzene	1048
aminobenzene	1083
4-aminobenzenesulfonic acid	1050
4-aminobenzoic acid	1049
1-aminobutane	1161
aminocarboxylic acids	1052
aminocyclohexane	1250
2-aminoethanol	1313
2-aminoglutaric acid	1358
(R)-2-amino-3-mercaptopropionic acid	1253
aminomethane	1482
aminosulfuric acid	1657
ammonia, aqeous solution	1054
ammonia, gaseous	1053
ammonium acetate	1056
ammonium alum	1035
ammonium aluminium sulfate	1035
ammonium benzoate	1057
ammonium bicabonate	1066
ammonium bisulfate	1067
ammonium bisulfide	1068
ammonium bromide	1058
ammonium carbonate	1059
ammonium chloride	1060
ammonium citrate	1061
ammonium dichromate	1062
ammonium dihydrogenphosphate	1099
ammonium fluoride	1063
ammonium formate	1065

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ammonium heptamolybdate	1069
ammonium hexafluorosilicate	1064
ammonium hydrogencarbonate	1066
ammonium hydrogenphosphate	1073
ammonium hydrogensulfate	1067
ammonium hydrogensulfide	1068
ammonium iron(II) sulfate	1046
ammonium iron(III) sulfate	1763
ammonium metatungstate	1055
ammonium molybdate	1069
ammonium nitrate	1070
ammonium oxalate	1071
ammonium peroxodisulfate	1072
ammonium persulfate	1072
ammonium rhodanide	1074
ammonium sulfamate	1075
ammonium sulfate	1076
ammonium sulfide	1077
ammonium thiocyanate	1074
amyl acetate	1078
amyl alcohol	1079
amyl alcohol (mixture of isomers)	1583
amyl chloride	1080
amyl laurate	1081
p-tert-amyl phenol	1082
aniline	1083
aniline sulfate	1084
aniline sulfite	1085
aniline-4-sulfonic acid	1050
anilinium sulfate	1084
anilinium sulfite	1085
p-anisaldehyde	1086
anise oil	1088
anisole	1087
antimony pentachloride	1091
antimony trichloride	1092
antimony(III) chloride	1092
antimony(V) chloride	1091
aqua regia	1425
argon	2776
arsenic acid	1095
arsenic sulfides	1096
arsenic trioxide	1097
arsenic(III) oxide	1097
arsenious acid	1094
arsenious acid anhydride	1097
L(+)-ascorbic acid	1098
9-azafluorene	1197
1-azanaphthalene	1202
barium carbonate	1100
barium chloride	1101
barium cyanide	1102
barium hydroxide	1103
barium nitrate	1104
barium peroxide	1105
barium sulfate	1106
barium sulfide	1107
baryta white	1106
beer	1129
beer colour	1130
benzal chloride	1110
benzaldehyde	1111
benzaldehyde oxime	1090
benzamide	1112
benzene	1117
benzenecarboxylic acid	1116
benzene-1,2-dicarboxylic acid	1598
benzenesulfonic acid	1120
benzine	1447
benzoic acid	1116
benzoic acid amide	1112
benzoic acid ammonium salt	1057
benzoic acid anhydride	1118
benzoic acid calcium salt	1172
benzoic acid chloride	1121
benzoic acid sodium salt	1119
benzoic anhydride	1118
benzophenone	1290
benzoyl chloride	1121
benzyl alcohol	1122
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N-benzyl-N-ethylaniline	1124
N-benzyl-N-ethylphenylamine	1124
benzylidene chloride	1110
beryllium chloride	1126
beryllium fluoride	1127
beryllium sulfate	1128
biphenyl	1287
1,1-bis(4-chlorophenyl)-2,2,2-trichloroethane	1255
bis(2-hydroxyethyl)amine	1271
bis(2-hydroxyethyl)ether	1273
bisulfite lye	1131
borax	1546
boric acid	1142
boric acid trimethyl ester	1689
(+/-)-borneol	1417
boron trichloride	1143
boron trifluoride	1144
brandy	1711
brine	1624
brine	1525
bromine	1148
bromine vapours	1146
bromine, aqueous solution	1150
1-bromobutane	1162
1-bromo-2-chloroethane	1145
bromochloromethane	1210
bromoethane	1147
bromoform	1149
bromomethane	1483
1,3-butadiene	1152
butane	1154
butane-1,4-dicarboxylic acid	1029
butanedioic acid	1125
1,4-butanediol	1153
1-butanethiol	1156
butanoic acid	1159
1-butanol	1155
butanone	1328
trans-2-butenal	1239
1-butene	1157
cis-2-butene-1,4-dioic acid	1470
trans-2-butenoic acid	1241
2-butoxyethanol	2143
butyl Cellosolve	2143
butyl acetate	1160
butyl acrylate	1028
butyl alcohol	1155
butylamine	1161
butyl bromide	1162
butyl chloride	1163
butylene	1157
butyl ether	1260
1-butyl mercaptan	1156
4-tert-butylphenol	1164
butyl phosphate	1165
butylstearate	1653
1-butyne	1158
butyric acid	1159
cadmium acetate	1166
cadmium chloride	1167
cadmium cyanide	1168
cadmium sulfate	1169
calcium acetate	1170
calcium acetylide	1174
calcium arsenate	1171
calcium benzoate	1172
calcium bicarbonate	1180
calcium bisulfite	1192
calcium bromide	1173
calcium carbide	1174
calcium carbonate	1175
calcium chlorate	1176
calcium chloride	1177
calcium chloride hypochlorite	1215
calcium chromate	1178
calcium dihydrogenphosphate	1188
calcium fluoride	1179
calcium hydrogencarbonate	1180
calcium hydrogensulfide	1181
calcium hydrogensulfite	1192

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calcium hydroxide	1182
calcium hypochlorite	1183
calcium nitrate	1184
calcium othoarsenate	1171
calcium oxalate	1185
calcium permanganate	1186
calcium peroxide	1187
calcium sulfate	1189
calcium sulfide	1190
calcium sulfite	1191
(+/-)-camphor	1193
camphor oil	1194
e-caprolactam	1195
e-caprolactone	1196
carbamide	1363
carbazole	1197
carbide	1174
carbolineum	1198
carbon dioxide	1423
carbon disulfide	1199
carbon monoxide	1424
carbon tetrabromide	1669
carbon tetrachloride	1672
carbonic acid diamide	1363
carbonic acid dichloride	1591
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Carbowax	1604
carboxylic acids > C6	1335
Caro's acid	1200
caustic soda	1547
cetylic acid	1578
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chloramine B	1207
chloric acid	1219
chloride of lime	1215
chlorine	1213
chlorine, aqueous solution	1224
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chloroacetic acid	1211
chloroacetic acid ethyl ester	1501
chloroacetic acid methyl ester	1502
chloroacetone	1205
chloroallyl chloride	1268
chlorobenzene	1208
N-chlorobenzenesulfonic acid amide sodium salt	1207
1-chlorobutane	1163
4-chloro-m-cresol	1216
chlorodifluoromethane	1347
1-chloro-2,3-epoxypropane	1307
chloroethanal	1204
chloroethane	1320
chloroethanol	1212
chloroethylene	1696
chloroform	1217
1-chloro-4-hydroxy-2-methylbenzene	1216
chloromethane	1484
chloromethyloxirane	1307
4-chloro-3-methylphenol	1216
1-chloropentane	1080
chlorophenol (2-, 3- a. 4-)	1218
chloropicrin	1686
3-chloro-1,2-propanediol	1361
1-chloro-2-propanone	1205
3-chloropropene	1033
chlorosulfonic acid	1220
chlorosulfuric acid	1220
chlorotoluene (2-, 3- a. 4-)	1221
a-chlorotoluene	1123
chlorotrifluoroethylene	1222
chromatite	1178
chromic acid	1232
chromium alum	1226
chromium(III) chloride	1227
chromium(III) fluoride	1228
chromium(III) hydroxide	1229
chromium(III) nitrate	1230
chromium(III) oxide	1231
chromium(III) potassium sulfate	1226
chromosulfuric acid	1233

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chromosulfuric acid	1237
chromosulfuric acid	1234
chromosulfuric acid	1235
chromosulfuric acid	1236
citric acid	1238
citric acid triammonium salt	1061
citric acid trisodium salt	1528
cod-liver oil	1446
colamine	1313
condensed water	1702
copper tetramine compounds	1438
copper(I) chloride	1429
copper(I) cyanide	1434
copper(II) acetate arsenate(III)	1431
copper(II) carbonate basic	1432
copper(II) carbonate hydroxide	1432
copper(II) chloride	1433
copper(II) fluoride	1437
copper(II) hydroxide carbonate	1432
copper(II) nitrate	1435
copper(II) sulfate	1436
creosote	1426
cresol (o-, m-, a. p-)	1427
cresol sulfonic acid	1428
crotonaldehyde	1239
crotonic acid	1241
crude oil	1309
cumene	1242
cyanamide	1243
cyanoacetic acid ethyl ester	1244
cyclohexanamine	1250
cyclohexane	1246
cyclohexanol	1247
cyclohexanone	1248
cyclohexene	1249
cyclohexylamine	1250
cymene (o-, m- a. p-)	1252
cys	1253
L-cysteine	1253
L-cystine	1254
DDT	1255
decahydronaphthalene	1256
decaline	1256
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dextrin	1258
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1,2-diaminoethane	1322
dibenzene	1287
dibenzo[b,d]pyrrole	1197
1,2-dibromoethane	1321
dibutyl ether	1260
dibutyl phthalate	1261
dichloroacetic acid	1263
dichlorobenzene (o-, m- a. p-)	1262
dichlorodifluoromethane	1345
dichlorodiphenyltrichloroethane	1255
1,2-dichloroethane	1264
1,1-dichloroethene	1265
1,1-dichloroethylene	1265
dichlorofluoromethane	1346
dichloromethane	1266
1,2-dichloropropane	1267
1,3-dichloropropene	1268
1,2-dichlorotetrafluoroethane	1269
a,a-dichlorotoluene	1110
Diesel fuels	1270
diethanolamine	1271
1,2-diethoxyethane	1325
diethylamine	1272
diethylene glycol	1273
diethyl ether	1274
diethyl glycol	1325
diethyl ketone	1275
diglycol	1273
diglycolic acid	1276
1,4-dihydroxybenzene	1373
diisobutyl ketone	1277
diisopropyl ether	1278
N,N-dimethylacetamide	1955
dimethylamine	1279

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N,N-dimethylaniline	1280
dimethylbenzene (mixture of isomers)	1715
dimethylene oxide	1326
dimethylformamide	1282
N,N-dimethylformamide	1282
2,6-dimethyl-4-heptanone	1277
1,1-dimethylhydrazine	1283
dimethyl ketone	1018
dimethyl phthalate	1284
dimethyl sulfate	1491
1,4-dioxane	1286
diphenyl	1287
diphenylamine	1288
diphenyl ether	1289
diphenyl ketone	1290
diphenyl oxide	1289
disodium hydrogenphosphate	1285
disodium tetraborate	1546
DMF	1282
DMP	1284
dodecanoic acid	1442
dodecanoic acid pentyl ester	1081
1-dodecanol	1444
dodecanoyl chloride	1443
EDTA	1323
epichlorohydrin	1307
1,2-epoxypropane	1610
ethanal	1014
ethane	1311
ethane-1,2-diamine	1322
ethane-1,2-dicarboxylic acid	1125
ethanedioic acid	1575
1,2-ethanediol	1324
ethanenitrile	1020
ethanoic acid	1310
ethanoic anhydride	1016
ethanoic chloride	1023
ethanol	1312
ethanolamine	1313
ethene	1314
ether	1274
ethinylcarbinol	1607
ethyl acetate	1317
ethyl acrylate	1318
ethyl alcohol	1312
ethylbenzene	1319
ethyl bromide	1147
ethyl chloride	1320
ethyl chloroacetate	1501
ethyl cyanoacetate	1244
ethylene	1314
ethylene bromide	1321
ethylene chloride	1264
ethylene chlorohydrin	1212
ethylenediamine	1322
ethylenediaminetetraacetic acid	1323
ethylene glycol	1324
ethylene glycol diethyl ether	1325
ethylene glycol dinitrate	1559
ethylene glycol monobutyl ether	2143
ethylene glycol monomethyl ether	2260
ethylene oxide	1326
ethyl ether	1274
2-ethyl-1-hexanol	1316
ethyl methyl ketone	1328
N-ethyl-N-phenylbenzylamine	1124
ethyne	1024
fatty acids > C6	1335
fatty alcohol sulfates	1332
fatty alcohols	1331
fatty alcohol ethoxylate isoC13O(EO)8	1353
ferric chloride	1298
fish liver oil	1446
fluorine	1336
fluoroboric acid	1337
fluorosilicic acid	1338
fluorspar	1179
formaldehyde	1340
formamide	1341
formic acid	1047

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formic acid amide	1341
formic acid ammonium salt	1065
formic acid methyl ester	1487
formic acid sodium salt	1531
Freon 11 (CFC-11, F-11)	1342
Freon 112 (CFC-112, F-112)	1343
Freon 113 (CFC-113, F-113)	1344
Freon 12 (CFC-12, F-12)	1345
Freon 21 (HCFC-21, F-21)	1346
Freon 22 (CFC-22, F-22)	1347
Frigen 11	1342
Frigen 114	1269
D-fructose	1349
fruit juice, fermented	1565
fruit juice, not fermented	1564
fruit juices	1348
fruit pulp	1563
furan	1350
furfural	1351
furfuryl alcohol	1352
2-furylaldehyde	1351
2-furylmethanol	1352
gallotannic acid	1665
gasoline, free of lead and aromatics	1113
gasoline, Super	1114
gelatine	1356
Genapol X-080	1353
D(+)-glucose	1259
glutamic acid	1358
glycerol	1360
glycine	1051
glycol	1324
glycolic acid	1359
guajacol/cresol-mixture	1426
gypsum	1189
n-heptane	1364
hexachloroethane	1584
hexadecanoic acid	1578
hexafluorosilicic acid	1338
hexahydro-2H-azepin-2-one	1195
hexahydrobenzene	1246
hexahydrotoluene	1485
n-hexane	1365
hexanedioic acid	1029
1,2,6-hexanetriol	1366
6-hexanolide	1196
honey	1370
hydrazine	1371
hydrazine hydrate	1372
hydrazinium hydroxide	1372
hydriodic acid	1383
hydrobromic acid	1151
hydrochloric acid	1623
hydrocyanic acid	1132
hydrofluoric acid	1339
hydrogen	1708
hydrogen chloride	1225
hydrogen cyanide	1132
hydrogen peroxide	1709
hydrogen sulfide	1635
hydrogen superoxide	1709
hydrogen tetrafluoroborate	1337
hydrogensulfite lye	1131
hydroquinone	1373
hydroxyacetic acid	1359
hydroxyaluminium diacetate	1034
hydroxybenzene	1588
2-hydroxybenzoic acid	1620
2-hydroxybenzoic acid methyl ester	1490
hydroxybutanedioic acid	1093
6-hydroxyhexanoic acid lactone	1196
hydroxylamine sulfate	1374
hydroxylammonium sulfate	1374
2-hydroxymethylfuran	1352
2-hydroxy-1,2,3-propanetricaboxylic acid	1238
3-hydroxypropene	1032
2-hydroxypropionic acid	1493
hydroxysuccinic acid	1093
2,2'-iminodiethanol	1271
iodine	1380

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iodine potassium iodide solution	1381
iodoform	1382
iron oxalate	1303
iron(II) chloride	1296
iron(II) hydroxide	1297
iron(II) nitrate	1301
iron(II) sulfate	1302
iron(II)/(III) oxalate	1303
iron(III) chloride	1298
iron(III) chloride sulfate	1295
iron(III) nitrate	1299
iron(III) sulfate	1300
isobutyl methyl ketone	1488
isobutyltrimethylmethane	1377
isooctane	1377
isooctanol	1316
isopropanol	1378
Isopropyl alcohol	1378
isopropylbenzene	1242
isopropyl ether	1278
Isopropylmethylbenzene (o-, m- a. p-)	1252
isovalerone	1277
kerosene	1586
lactic acid	1493
lactic acid sodium salt	1535
D(+)-lactobiose	1439
D(+)-lactose	1439
lanolin	1440
latex	1441
lauric acid	1442
lauric acid amyl ester	1081
lauric acid chloride	1443
lauroyl chloride	1443
lauryl alcohol	1444
lead tetraethyl	1673
lead(II) acetate	1133
lead arsenate	1134
lead(II) carbonate	1135
lead(II) chloride	1137
lead(II) hydrogenarsenate	1134
lead(II) nitrate	1138
lead(II) sulfate	1139
light oil	1448
light petrol	1447
lighting gas, benzene-free	1451
lignoceryl alcohol	1698
lime	1175
lime milk	1182
linoleic acid	1453
linseed oil	1450
liqueurs	1452
liquid manure	1379
lithium bromide	1455
lithium carbonate	1456
lithium chloride	1457
lithium hydroxide	1459
lithium sulfate	1460
magnesium carbonate basic	1462
magnesium chloride	1463
magnesium fluoride	1464
magnesium hydroxide	1465
magnesium nitrate	1466
magnesium oxide	1467
magnesium sulfate	1468
magnesium sulfite	1469
maleic acid	1470
malic acid	1093
malonic acid	1478
manganese dioxide	1472
manganese(II) chloride	1471
manganese(II) sulfate	1473
manganese(IV) oxide	1472
marmelade	1474
mercaptoacetic acid	1676
mercury	1612
mercury(II) chloride	1614
mercury(II) cyanide	1615
mercury(II) nitrate	1616
methacrylic acid methyl ester	1489
methanal	1340
methane	1477

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methanedicarboxylic acid	1478
methanesulfonic acid	1480
methanoic acid	1047
methanol	1479
4-methoxybenzaldehyde	1086
methoxybenzene	1087
2-methoxyethanol	2260
methyl acetate	1481
methyl Cellosolve	2260
methyl chloride	1484
methyl formate	1487
methyl salicylate	1490
methylacetic acid	1608
methyl alcohol	1479
methylamine	1482
methylbenzene	1679
4-methylbenzenesulfonic acid	1582
methylbromide	1483
4-(2-methyl-2-butyl)phenol	1082
methyl chloroacetate	1502
methyl cyanide	1020
methylcyclohexane	1485
methylene chloride	1266
methyl ethyl ketone (MEK)	1328
methyl isobutyl ketone (MIBK)	1488
methyl methacrylate	1489
4-methyl-2-pentanone	1488
methylphenol (o-, m-, a. p-)	1427
methyl phenyl ether	1087
methyl phenyl ketone	1021
(S)-(-)-1-methyl-2-(3-pyridyl)pyrrolidine	1554
methylsulfuric acid	1480
milk	1492
milk sugar	1439
mineral oils	1494
mineral water	1704
mixed acid: H2SO4 18%, HNO3 15%, HF 5%	1499
mixed acid: H2SO4 25%, HNO3 25%, HF 10%	1506
mixed acid: H2SO4 50%, HNO3 33%	1497
mixed acid: H2SO4 50%, HNO3 50%	1498
mixed acid: HCl 27%, HNO3 18%	1425
mixed acid: HNO3 12%, HF 5%	1723
mixed acid: HNO3 20%, H2SO4 10%	1495
mixed acid: HNO3 20%, HF 5%	1724
mixed acid: HNO3 50%, HF 10%	1500
mixed acid: HNO3 59%, HF 4,5%	1503
mixed acid: HNO3 87%, H2SO4 10%	1496
molasses	1476
Monoamyl phthalate	1599
monobytyl phthalate	1600
monochloroacetic acid	1211
monochloroacetic acid ethyl ester	1501
monochloroacetic acid methyl ester	1502
monochloroacetone	1205
monochlorobenzene	1208
monopentyl phthalate	1599
morphine	1504
morpholine	1505
murcury(II) sulfate	1613
naphthalene	1507
naphthalene sulfonic acid (mixture of isomers)	1508
natural gas	1308
niacin	1555
nickel(II) chloride	1548
nickel(II) nitrate	1549
nickel(II) sulfate	1550
nickel(II) sulfide	1551
nickel(II) sulfite	1552
nickel(II) tartrate	1553
(S)-(-)-nicotine	1554
nicotinic acid	1555
nitric acid	1621
2,2',2''-nitrilotriethanol	1687
nitrobenzene	1556
nitrobenzoic acid (o-, m- a. p-)	1557
nitrogen	1659
nitroglycol	1559
nitrophenol (o-, m- a. p-)	1560

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nitrotoluene (o-, m- a. p-)	1562
nitrotrichloromethane	1686
nitrous acid	1622
nitrous gases	1007
cis,cis-9,12-octadecadienoic acid	1453
octadecanoic acid	1652
octadecanoic acid butyl ester	1653
cis-9-octadecenoic acid	1573
octane	1566
octyloxytoluene (o-, m-, a. p-)	1567
octyl tolyl ether (o-, m-, a. p-)	1567
oil (vegetable + animal)	1569
oil of turpentine	1668
oleic acid	1573
oleum	1570
oleum vapours	1571
olive oil	1572
orthophosphoric acid	1574
orthosilicic acid	1421
oxalic acid	1575
oxalic acid calcium salt	1185
oxalic acid diammonium salt	1071
oxalic acid iron salts	1303
oxirane	1326
oxolane	1674
oxygen	1625
ozone	1576
PABA	1049
PAC	1603
palm kernel oil	1579
palm seed oil	1579
palmitic acid	1578
paraffin oil	1694
paraffins	1580
2,4-pentanedione	1022
pentanol (mixture of isomers)	1583
1-pentanol	1079
3-pentanone	1275
1-pentyl acetate	1078
1-pentyl chloride	1080
perchloric acid	1585
perchloroethane	1584
perchloroethene	1671
peroxomonosulfuric acid	1200
peroxosulfuric acid	1200
petrol-benzene mixture	1115
petroleum	1309
petroleum ether	1447
phenol	1588
N-phenylacetamide	1017
phenylamine	1083
N-phenylaniline	1288
4-phenylazoaniline	1048
phenylethane	1319
phenyl ether	1289
phenylethylene	1656
phenylformic acid	1116
phenylhydrazine	1590
2-phenylpropane	1242
phenylsulfonic acid	1120
phosgene	1591
phosphane	1594
phosphine	1594
phosphoric acid	1574
phosphoric acid butyl ester	1165
phosphoric acid tributyl ester	1681
phosphoric acid trichloride	1597
phosphoric acid trioctyl ester	1690
phosphoroxy chloride	1597
phosphorus pentoxide	1596
phosphorus trichloride	1595
phosphorus(III) chloride	1595
phosphorus(V) oxide	1596
phosphoryl chloride	1597
phthalic acid	1598
phthalic acid dibutyl ester	1261
phthalic acid dimethyl ester	1284
phthalic acid monobutyl ester	1600
phthalic acid monopentyl ester	1599
picric acid	1601
polyaluminium chloride	1603

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polydimethylsiloxane	1643
polyethylene glycol	1604
polyglycol, PEG	1604
potash	1395
potash lye	1384
potassium acetate	1386
potassium alum	1030
potassium aluminium sulfate	1030
potassium bicarbonate	1387
potassium bisulfate	1389
potassium bisulfite	1390
potassium borate	1392
potassium bromate	1393
potassium bromide	1394
potassium carbonate	1395
potassium chlorate	1396
potassium chloride	1397
potassium chlorite	1398
potassium chromate	1399
potassium chromium(III) sulfate	1226
potassium cyanate	1400
potassium cyanide	1401
potassium dichromate	1388
potassium dihydrogenphosphate	1411
potassium ferricyanide	1330
potassium ferrocyanide	1329
potassium fluoride	1402
potassium hexacyanoferrate(II)	1329
potassium hexacyanoferrate(III)	1330
potassium hydrogencarbonate	1387
potassium hydrogensulfate	1389
potassium hydrogensulfite	1390
potassium hydrogen-L-tartrate	1391
potassium hydroxide	1384
potassium hypochlorite	1403
potassium iodate	1404
potassium iodide	1405
potassium manganate(VII)	1409
potassium metaborate	1406
potassium nitrate	1385
potassium nitrite	1407
potassium perchlorate	1408
potassium permanganate	1409
potassium peroxodisulfate	1410
potassium persulfate	1410
potassium polyiodide solution	1381
potassium sulfate	1412
potassium sulfide	1413
potassium sulfite	1414
potassium L-tartrate	1415
propane	1605
propanedioic acid	1478
1,2-propanediol	1609
propanetriol	1360
propanoic acid	1608
1-propanol	1606
2-propanol	1378
propanone	1018
propargyl alcohol	1607
propene oxide	1610
2-propenoic acid ethyl ester	1318
propenol	1032
2-propin-1-ol	1607
propionic acid	1608
propyl alcohol	1606
propylene oxide	1610
propylene chloride	1267
propylene glycol	1609
prussiate, red	1330
prussiate, yellow	1329
pure water	1705
pyridine	1611
pyridine-3-carboxylic acid	1555
quinine	1201
quinol	1373
quinoline	1202
roasting gases, dry	1619
salicylic acid	1620
salicylic acid methyl ester	1490
Schweinfurter Green	1431
seawater	1703

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silicic acid	1421
silicone oil	1643
silver acetate	1638
silver chloride	1639
silver cyanide	1640
silver nitrate	1641
silver sulfate	1642
slaked lime	1182
soap	1627
soap hydrous solution	1637
soda	1522
soda lye	1547
soda water glass	1542
sodium acetate	1509
sodium aluminate	1510
sodium arsenate	1511
sodium arsenite	1512
sodium benzoate	1119
sodium bicarbonate	1513
sodium bisulfate	1515
sodium bisulfide	1517
sodium bisulfite	1518
sodium bromate	1520
sodium bromide	1521
sodium carbonate	1522
sodium chlorate	1524
sodium chloride	1525
sodium chlorite	1526
sodium chromate	1527
sodium citrate	1528
sodium cyanide	1529
sodium dichromate	1514
sodium fluoride	1530
sodium fluorosilicate	1420
sodium formate	1531
sodium hexafluorosilicate	1420
sodium hydrogencarbonate	1513
sodium hydrogenphosphate	1285
sodium hydrogensulfate	1515
sodium hydrogensulfide	1517
sodium hydrogensulfite	1518
sodium hydroxide	1547
sodium hypochlorite	1209
sodium hypophosphite	1533
sodium iodide	1534
sodium lactate	1535
sodium metasilicate	1542
sodium nitrate	1536
sodium nitrite	1537
sodium perborate	1519
sodium perchlorate	1538
sodium peroxide	1539
sodium peroxoborate	1519
sodium peroxodisulfate	1540
sodium persulfate	1540
sodium phosphate	1541
sodium phosphinate	1533
sodium silicate	1542
sodium sulfate	1543
sodium sulfide	1544
sodium sulfite	1545
sodium tetraborate	1546
sodium thiosulfate	1089
soft soap	1627
sperm oil	1644
spin bath acid with carbondisulfide	1646
starch gum	1258
starch sirup	1650
starch solution	1649
stearic acid	1652
stearic acid butyl ester	1653
strontium chloride	1655
styrene	1656
succinic acid	1125
sugar sirup	1722
sulfamic acid	1657
sulfamic acid ammonium salt	1075
sulfanilic acid	1050
sulfur	1628
sulfur dioxide, aqueous solution	1636
sulfur dioxide, gaseous	1629

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sulfur trioxide	1634
sulfuric acid	1632
sulfuric acid anhydride	1634
sulfuric acid dimethyl ester	1491
sulfurous acid	1636
sulfurous acid dichloride	1677
SurTec 104 universal cleaner	1658
table salt	1525
Tanigan® extra A	1660
Tanigan® extra B	1661
Tanigan® extra D	1662
Tanigan® F	1663
Tanigan® U	1664
tannic acid	1665
tannin	1665
tartar	1391
L-tartaric acid dipotassium salt	1415
L(+)-tartaric acid	1713
L(+)-tartaric acid monopotassium salt	1391
L(+)-tartaric acid nickel salt	1553
tartaric acid, naturally	1713
TBP	1681
TCE	1670
TEL	1673
tetrabromomethane	1669
1,1,2,2-tetrachloro-1,2-difluoroethane	1343
1,1,2,2-tetrachloroethane	1670
tetrachloroethene	1671
tetrachloroethylene	1671
tetrachloromethane	1672
1-tetracosanol	1698
tetraethyllead	1673
tetrafluoroboric acid	1337
1,2,3,4-tetrahydrobenzene	1249
tetrahydrofuran	1674
1,2,3,4-tetrahydronaphthalene	1675
tetrahydro-1,4-oxazine	1505
Tetralin®	1675
tetramethylene glycol	1153
THF	1674
thioglycolic acid	1676
thionyl chloride	1677
thiophene	1678
tin(II) chloride	1721
Titriplex® II	1323
toluene	1679
p-toluenesulfonic acid	1582
triammonium citrate	1061
tribromomethane	1149
tributyl phosphate	1681
trichloroacetaldehyde	1682
trichloroacetaldehyde hydrate	1206
trichloroacetic acid	1684
trichlorobenzene (mixture of isomers)	1683
trichloroborane	1143
trichloroethene	1685
trichloroethylene	1685
trichlorofluoromethane	1342
trichloromethane	1217
trichloronitromethane	1686
1,2,2-trichloro-1,1,2-trifluoroethane	1344
triethanolamine	1687
triethylene glycol	1688
trifluoroborane	1144
trifluorovinyl chloride	1222
triglyceride	1333
triglycol	1688
1,2,6-trihydroxyhexane	1366
2,6,8-trihydroxypurine	1362
triiodomethane	1382
trimethyl borate	1689
2,2,4-trimethylpentane	1377
2,4,6-trinitrophenol	1601
trioctyl phosphate	1690
trioxygen	1576
trisodium citrate	1528
trisodium phosphate	1541
turpentine	1666
turpentine benzine	1667
urea	1363
uric acid	1362

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urine	1692
vaseline	1693
vaseline oil	1694
vinyl acetate	1695
vinylbenzene	1656
vinyl chloride	1696
vinyl cyanide	1027
vinylidene dichloride	1265
viscose spinning solutions	1697
vitamin C	1098
waste gas with carbon dioxide	1006
waste gas with carbon monoxide	1005
waste gas with hydrogen cyanide	1003
waste gas with hydrogen fluoride	1004
waste gas with nitrous gases	1007
waste gas with sulfur dioxide	1010
waste gas with sulfur trioxide	1012
water, condensed	1702
water, mineral water	1704
water, pure	1705
water, seawater	1703
water, traces of butanol and phenol	1706
wax alcohol	1698
wine vinegar	1712
wine, red and white	1710
xylene (mixture of isomers)	1715
zinc carbonate basic	1716

zinc chloride	1717
zinc hydrogenphosphate	1719
zinc hydroxide carbonate	1716
zinc nitrate	1718
zinc sulfate	1720

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1003	**waste gas with hydrogen cyanide**	gf	GK	20	+		+	+	+	+	+	+														
		gf	GK	40						+	+	+														
		gf	GK	60						+	+	+														
HCN		gf	GK	80						+	+	+														
CHN		gf	GK	100						+	+	+														
		gf	GK	120							+	+														
1004	**waste gas with hydrogen fluoride**	gf	GK	20	+		+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+				
		gf	GK	40	+		+	+		+	+	+		+	+	+	+	0	+	+	+	+				
		gf	GK	60	+		+	+		+	+	+		+	+	+	+		0	0	+	+				
		gf	GK	80						+	+	+									+	0				
HF		gf	GK	100						+	+	+														
		gf	GK	120						+	+	+														
1005	**waste gas with carbon monoxide**	gf	HK	20	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		gf	HK	40	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		gf	HK	60	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		gf	HK	80		+		+	+	+	+	+							+		+	+				
CO		gf	HK	100						+	+	+									+					
		gf	HK	120						+	+	+									+					
1006	**waste gas with carbon dioxide**	gf	HK	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			
		gf	HK	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			
		gf	HK	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			
		gf	HK	80		+				+	+	+											+			
CO2		gf	HK	100						+	+	+											+			
		gf	HK	120						+	+	+											+			

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

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Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1007	**waste gas with nitrous gases**	gf	GK	20	+	+	+	+	+	+	+	+		0		+		0	+		+	+	+			
nitrous gases		gf	GK	40	+	+	+	+	+	+	+	+				+		0	+		+	+	+			
		gf	GK	60	+	+	+	0	0	+	+	+				+		-	+		+	+	+			
		gf	GK	80		+				+	+	+							0		+	0	+			
NOx		gf	GK	100						+	+	+									0		+			
		gf	GK	120						+	+	+											+			
		gf	HK	20	+	+	+	+	+	+	+	+		-				0	+		+		+			
		gf	HK	40	0	+	+	0	0	+	+	+						-	0		+		+			
		gf	HK	60	0	+	0	-	-	+	+	+							-		+		+			
		gf	HK	80						+	+	+											+			
		gf	HK	100						+	+	+											+			
		gf	HK	120						+	+	+											+			
1010	**waste gas with sulfur dioxide**	gf	GK	20	+		+	+	+	+	+	+		+		+		0	+	+	+	+				
		gf	GK	40	+		+	+	+	+	+	+		+		+		-	+	+	+	+				
		gf	GK	60	+		+	+	+	+	+	+		0		+			+	+	+	+				
SO2		gf	GK	80				+	+	+	+	+				+			+		+	+				
O2S		gf	GK	100						+	+	+				0					+					
		gf	GK	120							+	+				-										
1012	**waste gas with sulfur trioxide**	gf	GK	20	+		+	+	+	+	+	+						0	+	+	+	+				
		gf	GK	40	+		+	+	+	+	+	+						-	+	+	+	+				
		gf	GK	60	+		+	0	0	+	+	+							+	+	+	+				
SO3		gf	GK	80				0	0	+	+	+							0		+					
O3S		gf	GK	100						+	+	+														
		gf	GK	120							+	+														

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

Stübbe
Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1014	**acetaldehyde**	wä	10%	20	+	-	+	+	+	+	+	+		0	+	+	0	-	+	+	+	+	+	+	+	+
ethanal		wä	10%	40	0	-	+	+	+	+	+	+			+	+	-		+	+	+	+	+	+	+	+
		wä	10%	60		-		+	+	+	+	+			+	+			+	0	0	+	+	+		
CH3CHO		wä	10%	80		-		+	+	+	+	+			+	+			+			+		+		
C2H4O		wä	40%	20	0	-	+	+	+	+	+	+		0	+	+	0	-	+	+	+	+	+	+	+	+
		wä	40%	40	0	-	+	+	+	+	+	+			+	+	-		+	+	+	+	+	+	+	+
		wä	40%	60	-	-		+	+	+	+	+			+	+			+	0	0	+	-	+		
			TR	20	-	-	+	0	0	-	+	+		-	+	+	+	-	-	-	-	0	+	+	+	+
1015	**acetamide**		TR	20			+	+	+		+	+						0	-	-	+	-	+			
acetic acid amide			TR	40			+	+	+		+	+						-			+		+			
			TR	60			+	+	+		+	+									+		+			
CH3CONH2			TR	80							+	+											+			
C2H5NO			TR	100							+	+											+			
1016	**acetic anhydride**		TR	20	-	-	+	+	+	-	+	+		-	0	+	+	-	+	+	-	+	+	+	+	+
ethanoic anhydride			TR	40			0	0	0		+	+				+	+						+	+	+	+
			TR	60			-	-	-		+	+				+	+							+		+
(CH3CO)2O			TR	80							+	+				+	+			0				+		+
C4H6O3			TR	100							+	+														
			TR	120							+	+														
1017	**acetanilide**		TR	20	+						+	+						0	-	+	0	-				
N-phenylacetamide			TR	40	+						+	+								+	0					
acetic acid anilide			TR	60							+	+								+	0					
CH3CONHC6H5			TR	80							+	+								+	0					
C8H9NO			TR	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1018	**acetone**	wä	1%	20	-	-	+	+	+	+	+	+		+	+	+	+	-	+	-	-	0	+	+	+	+
propanone		wä	1%	40			+	+	+	+	+	+			+	+	+		+			0	+	+	+	+
dimethyl ketone		wä	1%	60			+	+	+	+	+	+			+	+	+		+			0	+	+	+	+
CH3COCH3		wä	1%	80							+	+			+	+	+						+	+		
C3H6O		wä	1%	100							+	+			+	+	+						+	+		
		wä	10%	20	-	-	+	+	+	+	+	+	-		+	+	+	-	+	-	-	0	+	+	+	+
		wä	10%	40			+	+	+	+	+	+			+	+	+		+			0	+	+	+	+
		wä	10%	60			+	+	+	0	+	+			+	+	+		+			0	+	+	+	+
		wä	10%	80							+	+			+	+	+		+				+	+		
		wä	10%	100							+	+											+	+		
			TR	20	-	-	+	+	+	-	+	+	-	-	+	+	+	-	+	-	-	0	+	+	+	+
			TR	40			+	+	+		+	+			+	+	+		0			0	+	+	+	+
			TR	60			+	+	+		+	+			+	+	+					0	+	+		+
1020	**acetonitrile**		TR	20	-	-	+	+	+	+	+	+		-	+	+	+	0	-	0	0	-	+	+	+	+
ethanenitrile			TR	40	-	-	+	+	+	+	+	+		-	+	+	+	0		0	0		+	+		
methyl cyanide			TR	60	-	-	+	+	+	0	+	+			+	+	+	0		0	0			+		
CH3CN			TR	80		-					+	+			+	+	+							+		
C2H3N																										
1021	**acetophenone**		TR	20	-	-	+	+	+	-	+	+	-		+	+	+						+	+		+
acetylbenzene			TR	40	-			+	+	-	+	+			+	+	+						+	+		+
methyl phenyl ketone			TR	60				0	0	-	+	+			+	+	+						+	+		+
C6H5COCH3			TR	80				-	-		+	+			+	+	+							+		+
C8H8O			TR	100							+	+			+	+	+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1022	**acetylacetone**		TR	20	-					-	+	+	-													
2,4-pentanedione			TR	40	-						+	+														
			TR	60	-						+	+														
CH3COCH2COCH3			TR	80							+	+														
C5H8O2			TR	100							+	+														
1023	**acetyl chloride**		TR	20						-	+	+						-	-	-	-	-		+		
ethanoic chloride			TR	40							+	+												+		
			TR	60							+	+														
CH3COCl																										
C2H3ClO																										
1024	**acetylene**	gf	HK	20	+		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+		
ethyne		gf	HK	40							+	+			+	+	+	+	+	+	+	+	+	+		
		gf	HK	60							+	+			+	+	+	+	+	+	+	+	+	+		
HCCH		gf	HK	80							+	+														
C2H2		gf	HK	100							+	+														
1025	**acetylsalicylic acid**	wä	VL	20	+		+	+	+	-	+	+					+				-	+	+	+	+	+
O-acetylsalicylic acid		wä	VL	40			+	+	+		+	+					+						+	+	+	+
2-acetyloxybenzoic acid		wä	VL	60			+	0	0		+	+					+						+	+	+	+
2-(CH3CO2)C6H4CO2H		wä	VL	80							+	+					+						+	+		
C9H8O4		wä	VL	100							+	+					+							+		
			TR	20	+		+	+	+		+	+					+		0		-	+	+	+	+	+
			TR	40			+	+	+		+	+					+						+	+	+	+
			TR	60			+	+	+		+	+					+						+	+	+	+
			TR	80							+	+					+						+	+		
			TR	100							+	+					+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1027	**acrylonitrile**		TR	20	-		+	+	+	0	+	+	0		+	+	+	-	+	+	0	0	+	+	+	+
vinyl cyanide			TR	40	-		+	0	0	-	+	+	0		+	+	+	-	+	+	0	0	+	+		+
			TR	60	-		+				+	+			+	+	+	-	0	+	-	-		+		+
CH2=CHCN			TR	80							+	+					+	-								
C3H3N			TR	100							+	+						-								
1028	**acrylic acid butyl ester**		TR	20	-	-	+	+	+		+	+			+	+	+	-	0	0	-	+	+	+	+	+
butyl acrylate			TR	40			0	0	0		+	+			+	+	+						+	+	+	+
			TR	60							+	+			+	+	+							+		+
CH2=CHCO2(CH2)3CH3			TR	80							+	+			+	+	+							+		+
C7H12O2			TR	100							+	+			+	+	+							+		+
1029	**adipic acid**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
butane-1,4-dicarboxylic acid		wä	GL	40	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
hexanedioic acid		wä	GL	60	0	+	+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
HO2C(CH2)4CO2H		wä	GL	80		+		+	+		+	+					+							+		
C6H10O4		wä	GL	100							+	+					+							+		
1030	**alum**	wä	10%	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
potassium aluminium sulfate		wä	10%	40	+	+	+	+	+	+	+	+	+	+			+	0	+	+	+	+	+	+	+	+
potassium alum		wä	10%	60	+	+	+	+	+	+	+	+					+	-	+	-	+	+	+	+	+	+
KAl(SO4)2		wä	10%	80		+				+	+	+					+		+		+	+	+	+	+	
AlKO8S2		wä	10%	100						+	+	+							+	+	+	+	+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	0	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	0	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+					+	-	+	+	+	+	+	+	+	+
		wä	GL	80		+				+	+	+					+		+	+	+	+	+	+	+	
		wä	GL	100						+	+	+							+		+	+	+	+	+	

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1031	**alkanesulfonic acids (mixtures)**	wä	10%	20	+						+	+					+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+						+	+					+						+	+	+	+
		wä	10%	60	+						+	+					+						+	+		+
RSO3H		wä	10%	80							+	+					+						+	+		+
		wä	10%	100							+	+					+						+	+		
1032	**allyl alcohol**		TR	20	0	0	+	+	+	+	+	+	-	0	+	+	+	+	0	0	0	+	+	+	+	+
propenol			TR	40	-		+	+	+	+	+	+	-		+	+	+	+	0	-	-	+	+	+	+	+
3-hydroxypropene			TR	60			+	+	+	+	+	+			+	+	+		0			+	+	+	+	+
CH2=CHCH2OH			TR	80							+	+			+	+	+							+		
C3H6O			TR	100							+	+			+	+	+							+		
1033	**allyl chloride**		TR	20	-	-	0			+	+	+			+	+	+							+	+	+
3-chloropropene			TR	40	-	-	-			+	+	+			+	+	+							+		+
CH2=CHCH2Cl																										
C3H5Cl																										
1034	**aluminium acetate basic**	wä	GL	20	+	+	+	+	+	+	+	+					+						+	+	+	+
hydroxyaluminium diacetate		wä	GL	40	+	+	+	+	+	+	+	+					+						+	+	+	+
		wä	GL	60		+				+	+	+					+						+	+	+	+
(CH3CO2)2AlOH		wä	GL	80		+				+	+	+					+									
C4H7AlO5		wä	GL	100						+	+	+														
1035	**aluminium ammonium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+					+						+	+	+	+
ammonium aluminium sulfate		wä	GL	40	+	+	+	+	+	+	+	+					+						+	+	+	+
ammonium alum		wä	GL	60		+	+	+	+	+	+	+					+						+	+	+	+
AlNH4(SO4)2		wä	GL	80		+				+	+	+					+						+	+	+	
H4AlNO8S2		wä	GL	100							+	+											+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1036	**aluminium chlorate**	wä	GL	20	+					+	+	+					+							+	+	+
		wä	GL	40						+	+	+					+							+	+	+
		wä	GL	60						+	+	+												+		+
Al(ClO3)3		wä	GL	80						+	+	+												+		
AlCl3O9		wä	GL	100							+	+												+		
1037	**aluminium chloride**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	-	0	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+		-	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	+	+	+	+	+	+	+	+	0	0			+	0	+	+	+	+	+	+	+	+
		wä	10%	80		+		+	+	+	+	+					+		+		+	+	+	+		+
AlCl3		wä	10%	100						+	+	+					+				+	+	+	+		+
		wä	GL	20	+	+	+	+	+	+	+	+		+	-	-	+		+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+	+	+	+		+
		wä	GL	100				0	0	+	+	+					+				+	+	+	+		+
1039	**aluminium iron(II) sulfate**	wä	GL	20	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+						+	+	+	+
Al2Fe(SO4)4		wä	GL	80						+	+	+					+						+	+	+	
Al2FeO16S4		wä	GL	100							+	+					+						+	+	+	
1040	**aluminium fluoride**	wä	GL	20	+	+	+	+	+	+	+	+						+	+	0	+	+	+	+	+	
aluminium trifluoride		wä	GL	40	+	+	+	+	+	+	+	+						+	+	0	+	+	+	+	+	
		wä	GL	60		+	+	+	+	+	+	+						0	+	-	+	+	+	+	+	
		wä	GL	80		+				+	+	+						-	+		+	+	+	+		
AlF3		wä	GL	100						+	+	+							+		+		+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1041	**aluminium fluorosilicate**		TR	20	+		+	+	+	+	+	+														
			TR	40							+	+														
			TR	60							+	+														
Al2F2(SiO4)			TR	80							+	+														
Al2F2O4Si			TR	100							+	+														
1042	**aluminium hydroxide**		TR	20	+	+	+	+	+	+	+	+														
			TR	40		+	+	+	+	+	+	+														
			TR	60		+	+	+	+	+	+	+														
Al(OH)3			TR	80		+				+	+	+														
H3AlO3			TR	100						+	+	+														
1043	**aluminium nitrate**	wä	GL	20	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+						+	+	+	+
Al(NO3)3		wä	GL	80		+				+	+	+					+						+	+	+	
AlN3O9		wä	GL	100						+	+	+					+						+	+	+	
1044	**aluminium oxide**		TR	20	+		+	+	+	+	+	+														
alumina			TR	40						+	+	+														
			TR	60						+	+	+														
			TR	80						+	+	+														
Al2O3			TR	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1045	**aluminium sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+	0	+	+	+	+	+	+	+	+	+	+	+
Al2(SO4)3		wä	10%	80		+		+	+	+	+	+			0	+	+				+	0	+	+	+	+
Al2O12S3		wä	10%	100						+	+	+			0	+	+						+	+	+	+
		wä	GL	20	+	+	+	+	+	+	+	+		+	0	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	0	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	-	0	+	+	+	+	+	0	+	+	+	+
		wä	GL	80		+		+	+	+	+	+				0	+				+	0	+	+	+	+
		wä	GL	100						+	+	+				0	+						+	+	+	+
1046	**ammonium iron(II) sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
(NH4)2Fe(SO4)2		wä	10%	80		+		+	+	+	+	+					+		+		+		+	+		+
H8FeN2O8S2		wä	10%	100						+	+	+					+						+	+		+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+		+
		wä	GL	100						+	+	+					+						+	+		+

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
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1047	formic acid	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	10%	20	+	+	+	+	+	+	+	+	-	+	+	+	+	-	+			+		+	+	+
methanoic acid		wä	10%	40	+	+	+	+	+	+	+	+			+	+	+				-	-		+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+			0	+	+					-		+		+
HCO2H		wä	10%	80		+		+	+	+	+	+			-	0	+							+		+
CH2O2		wä	10%	100						+	+	+				0								+		
		wä	25%	20	+		+	+	+	+	+	+	-		+	+	+	-						+	+	+
		wä	25%	40	+		+	+	+	+	+	+			0	+	+		0		-			+	+	+
		wä	25%	60	0		+			+	+	+			-	0	+							+		+
		wä	25%	80						+	+	+				0	+							+		+
		wä	25%	100						+	+	+				0								+		
		wä	50%	20	+	0	+	+	+	+	+	+	-		+	+	+	-				+		+	+	+
		wä	50%	40	+		+	+	+	+	+	+		0	0	+	+				-	-		+	+	+
		wä	50%	60	0		+	0	0	+	+	+			-	0	+					-		+		+
		wä	50%	80		-				+	+	+				0	+							+		+
		wä	50%	100						+	+	+				0								+		
		wä	85%	20	+	0	+	+	+	+	+	+	-		+	+	+	-				+		+	+	+
		wä	85%	40	0		+	0	0	+	+	+			0	+	+				-	+		+		+
		wä	85%	60	-		+	0	0	+	+	+			-	0	+					+		+		+
		wä	85%	80		-				+	+	+				0	+					0		+		+
		wä	85%	100						+	+	+				0						0		+		
			TR	20	+	0	+	-	-	+	+	+	-	0	+	+	+	-			-	+		+	+	+
			TR	40	0		+			+	+	+		0	0	+	+					+		+		+
			TR	60	-		+			0	+	+		0	-	0	+					+		+		+
			TR	80		-					+	+				0	+					0		+		+
			TR	100							+	+				0								+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1048	**p-aminoazobenzene**		TR	20	+						+	+														
4-phenylazoaniline			TR	40	0						+	+														
			TR	60							+	+														
C6H5N=NC6H4NH2			TR	80							+	+														
C12H11N3			TR	100							+	+														
1049	**4-aminobenzoic acid**	wä	GL	20	+		+	+	+		+	+					+						+	+	+	+
PABA		wä	GL	40			+	+	+		+	+					+						+	+	+	+
		wä	GL	60			+	+	+		+	+					+						+	+	+	+
4-(NH2)C6H4CO2H		wä	GL	80							+	+					+						+	+	+	+
C7H7NO2		wä	GL	100							+	+					+						+	+	+	
1050	**4-aminobenzenesulfonic acid**	wä	GL	20	+		+	+	+		+	+					+						+	+	+	+
sulfanilic acid		wä	GL	40			+	+	+		+	+					+						+	+	+	+
aniline-4-sulfonic acid		wä	GL	60							+	+					+						+	+	+	+
4-(NH2)C6H4SO3H		wä	GL	80							+	+					+						+	+	+	+
C6H7NO3S		wä	GL	100							+	+					+						+	+	+	
1051	**aminoacetic acid**	wä	10%	20	+		+	+	+	+	+	+	-			+	+	+	+	+	+	+	+	+	+	+
glycine		wä	10%	40	+		+	+	+	+	+	+	-				+	0	+	+	+	0	+	+	+	+
		wä	10%	60			+	+	+	+	+	+					+						+	+	+	+
NH2CH2CO2H		wä	10%	80						+	+	+					+						+	+	+	+
C2H5NO2		wä	10%	100							+	+					+						+	+	+	
1052	**amino acids**	wä	GL	20	+		+	+	+	+	+	+					+						+	+	+	
aminocarboxylic acids		wä	GL	40			+	+	+	+	+	+					+						+	+	+	
		wä	GL	60						+	+	+											+	+	+	
NH2CH(R)CO2H		wä	GL	80						+	+	+												+	+	
		wä	GL	100							+	+												+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1053	**ammonia, gaseous**	gf	HK	20	+	-	+	+	+	0	+	+		+	+	+	+	+	+	+	+	+	+	+	+	
		gf	HK	40	+	-	+	+	+	0	+	+			+	+	+	0	+	+	0		+	+	+	
		gf	HK	60	+	-	+	+	+	0	+	+			+	+	+	-	+	+			+	+	+	
NH3		gf	HK	80		-					+	+					+							+	+	
H3N		gf	HK	100							+	+					+							+	+	
		gf	HK	120							+	+														
1054	**ammonia, aqeous solution**	wä	10%	20	+	-	+	+	+	0	+	+		+	+	+	+	+	+	+	0	+	+	+	+	+
		wä	10%	40	+	-	+	+	+	0	+	+		+	+	+	+	0	+	+			+	+	+	+
		wä	25%	20	+	-	+	+	+	-	+	+		+	+	+	+	+	+	+	-	+	+	+	+	+
NH3 • xH2O		wä	25%	40	+	-	+	+	+	-	+	+		+	+	+	+	0	+	+			+	+	+	+
H3N																										
1055	**ammonium metatungstate**		TR	20	+		+	+	+	+	+	+														
			TR	40							+	+														
			TR	60							+	+														
(NH4)6H2W12O40			TR	80							+	+														
H26N6O40W12			TR	100							+	+														
			TR	120							+	+														
1056	**ammonium acetate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	0	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+		+	0	+	+	+	+	+	+
CH3CO2NH4		wä	GL	80		+		+	+	+	+	+		+			+		0				+	+	+	
C2H7NO2		wä	GL	100				+	+	+	+	+					+						+	+	+	

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1057	**ammonium benzoate**	wä	GL	20		+	+	+	+								+						+	+	+	+
benzoic acid ammonium salt		wä	GL	40		+	+	+	+								+						+	+	+	+
		wä	GL	60		+											+						+	+	+	+
C6H5CO2NH4		wä	GL	80		+											+						+	+	+	
C7H9NO2		wä	GL	100													+						+	+	+	
1058	**ammonium bromide**	wä	GL	20	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
NH4Br		wä	GL	80						+	+	+					+	+	+	+	+	+	+	+	+	
H4BrN		wä	GL	100							+	+					+						+	+	+	
1059	**ammonium carbonate**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+					+			+	+	+	+	+	+	+	+		+
		wä	GL	60	0									+			+		+	+	0	+	+	+		+
(NH4)2CO3		wä	GL	80													+						+	+		
CH8N2O3		wä	GL	100													+						+	+		
1060	**ammonium chloride**	wä	GL	20	+	+	+	+	+	+	+	+			0	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	0	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	0	+	+	+	+	+	+	+	+	+	+	+
NH4Cl		wä	GL	80		+		+	+	+	+	+		+	-	+	+	+	+	+	+	+	+	+	+	
H4ClN		wä	GL	100				+	+	+	+	+		+		0	0	+	+		+	+	+	+	+	
1061	**ammonium citrate**		TR	20	+	+				+	+	+														
triammonium citrate			TR	40	+	+				+	+	+														
citric acid triammonium salt			TR	60	0	+				+	+	+														
H4NO2CCH2C(OH)(CO2NH4)CH2CO2NH4			TR	80		+				+	+	+														
C6H17N3O7			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1062	**ammonium dichromate**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+		+		+		+	+		+
		wä	GL	40		+				+	+	+			+	+	+				+		+	+		+
		wä	GL	60		+				+	+	+			+	+	+						+	+		+
(NH4)2Cr2O7		wä	GL	80		+					+	+					+						+	+		
H8Cr2N2O7		wä	GL	100																			+	+		
1063	**ammonium fluoride**	wä	VL	20	+	+	+	+	+	+	+	+					+	+	+	0	+	+	+	+	+	
		wä	VL	40	+	+	+	+	+	+	+	+					+	+	+	0	+	+	+	+	+	
		wä	VL	60		+	+	+	+	+	+	+					+		+			+	+	+	+	
NH4F		wä	VL	80		+				+	+	+					+		+			+	+	+		
H4FN		wä	VL	100						+	+	+						+	+	0	-	+	+	+		
		wä	GL	20		+		+	+	+	+	+					+	+	+	0	+	+	+	+	+	
		wä	GL	40		+		+	+	+	+	+					+	+	+		+	+	+	+	+	
		wä	GL	60		+		+	+	+	+	+					+	0	+		+	+	+	+	+	
		wä	GL	80		+				+	+	+					+		+		+	+	+	+		
		wä	GL	100						+	+	+							+		+		+	+		
1064	**ammonium hexafluorosilicate**	wä	GL	20	+		+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	40			+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	60						+	+	+					+						+	+	+	+
(NH4)2SiF6		wä	GL	80						+	+	+					+						+	+	+	
H8F6N2Si		wä	GL	100						+	+	+					+						+	+	+	
1065	**ammonium formate**	wä	GL	20	+		+	+	+	+	+	+					+		+		+		+	+	+	+
formic acid ammonium salt		wä	GL	40			+	+	+	+	+	+					+						+	+	+	+
		wä	GL	60						+	+	+					+						+	+	+	+
HCO2NH4		wä	GL	80						+	+	+					+						+	+	+	
CH5NO2		wä	GL	100						+	+	+					+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1066	**ammonium hydrogencarbonate**	wä	GL	20	+		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
ammonium bicabonate		wä	GL	40	+		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60			+	+	+		+	+			+	+	+		+		+	+	+	+	+	+
NH4HCO3		wä	GL	80							+	+			+	+	+					+	+	+	+	
CH5NO3		wä	GL	100							+	+											+	+	+	
1067	**ammonium hydrogensulfate**	wä	GL	20	+		+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+	+
ammonium bisulfate		wä	GL	40	+		+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60				+	+	+	+	+				+	+	0	+	+	+	0	+	+	+	+
(NH4)HSO4		wä	GL	80						+	+	+					+				+		+	+	+	+
H5NO4S		wä	Gl	100							+	+					+						+	+	+	
1068	**ammonium hydrogensulfide**	wä	VL	20	+	+	+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+	+
ammonium bisulfide		wä	VL	40	+	+				+	+	+				+	+	+	+	+	0	+	+	+	+	+
		wä	VL	60	+	+				+	+	+				+	+	+	+		0	+	+	+	+	+
(NH4)HS		wä	VL	80		+				+	+	+									-	+	+	+	+	
H5NS		wä	VL	100						+	+	+											+	+	+	
1069	**ammonium molybdate**	wä	GL	20	+		+	+	+		+	+							+		+		+	+	+	+
ammonium heptamolybdate		wä	GL	40			+	+	+		+	+							+		+		+	+	+	+
		wä	GL	60							+	+											+	+	+	+
(NH4)6Mo7O24		wä	GL	80							+	+											+	+	+	
H24Mo7N6O24		wä	GL	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1070	**ammonium nitrate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	0	+	+	+	+	+		+	+	+	+	0	+		+	0	+	+	+	+
NH4NO3		wä	10%	80		+		0	0	+	+	+			+	+	+		+		+		+	+	+	
H4N2O3		wä	10%	100						+	+	+					+						+	+	+	
		wä	50%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	50%	40	+	+	+	+	+	+	+	+			+	+	+	0	+	+	+	+	+	+	+	+
		wä	50%	60	0	+	0	+	+	+	+	+			+	+	+	0			+		+	+	+	+
		wä	50%	80		+				+	+	+			+	+	+	0			+		+	+	+	
		wä	50%	100							+	+			+	+	+	-					+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	0	+	+	+	+	+		+	+	+	+	0	+		+	0	+	+	+	+
		wä	GL	80		+		0	0	+	+	+		+	+	+	+				+		+	+	+	
		wä	GL	100						+	+	+			+	+	+						+	+	+	
1071	**ammonium oxalate**	wä	GL	20	+		+	+	+	+	+	+					+				+		+	+	+	+
oxalic acid diammonium salt		wä	GL	40			+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	60						+	+	+					+						+	+	+	+
(NH4)2C2O4		wä	GL	80						+	+	+					+						+	+	+	
C2H8N2O4		wä	GL	100						+	+	+					+						+	+	+	

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Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1072	**ammonium peroxodisulfate**	wä	VL	20	+		+	+	+	+	+	+									+		+	+	+	+
ammonium persulfate		wä	VL	40	+		+	+	+	+	+	+									+		+	+	+	+
		wä	VL	60	+					+	+	+											+	+	+	+
(NH4)2S2O8		wä	VL	80						+	+	+											+	+	+	
H8N2O8S2		wä	VL	100						+	+	+											+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+									+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+									+		+	+	+	+
		wä	GL	60						+	+	+											+	+	+	+
		wä	GL	80						+	+	+											+	+	+	
		wä	GL	100						+	+	+											+	+	+	
1073	**ammonium hydrogenphosphate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+		+	+	+	+	+	+		+	+	+	+	0	+	+	+	0	+	+	+	+
(NH4)2HPO4		wä	GL	80		0		+	+	+	+	+					+		+		+		+	+	+	
H9N2O4P		wä	GL	100				+	+	+	+	+					+				+		+	+	+	
1074	**ammonium thiocyanate**	wä	GL	20	+	+	+	+	+	+	+	+					+				+		+	+	+	+
ammonium rhodanide		wä	GL	40		+	+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+						+	+	+	+
NH4SCN		wä	GL	80		+				+	+	+											+	+	+	
CH4N2S		wä	GL	100						+	+	+											+	+	+	
1075	**ammonium sulfamate**	wä	GL	20		+	+	+	+		+	+							+				+	+	+	+
sulfamic acid ammonium salt		wä	GL	40		+	+	+	+		+	+							+				+	+	+	+
		wä	GL	60		+					+	+											+	+	+	+
NH2SO3NH4		wä	GL	80		+					+	+											+	+	+	
H6N2O3S		wä	GL	100							+	+														

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1076	ammonium sulfate	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+	0	+	+	0	+	+	+	0	+	+	+	+
(NH4)2SO4		wä	10%	80		+		+	+	+	+	+		+	0	+	+		+		+		+	+	+	+
H8N2O4S		wä	10%	100						+	+	+			0	+	+				+		+	+	+	+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	0	+	+	0	+	+	+	0	+	+	+	+
		wä	GL	80		+		+	+	+	+	+		+	0	+	+		+		+		+	+	+	+
		wä	GL	100						+	+	+			0	+	+				+		+	+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1077	**ammonium sulfide**	wä	10%	20	+	+	+	+	+	+	+	+	+			+		+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+			+		+	+	+	0	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+				+		+	+	+	-	+	+	+	+	+
(NH4)2S		wä	10%	80		+		+			+	+											+	+		
H8N2S		wä	10%	100							+	+											+	+		
		wä	20%	20	+	+	+	+	+	+	+	+	+			+		+	+	+	+	+	+	+	+	+
		wä	20%	40	+	+	+	+	+	+	+	+	+			+		+	+	+	0	+	+	+	+	+
		wä	20%	60	0	+	+	+	+	+	+	+				+		+	+	+	-	+	+	+	+	+
		wä	20%	80		+		+			+	+											+	+		
		wä	20%	100							+	+											+	+		
		wä	40%	20	+	+	+	+	+	+	+	+	-			+		+	+	+	+	+	+	+	+	+
		wä	40%	40	+	+	+	+	+	+	+	+	-			+		+	+	+	0	+	+	+	+	+
		wä	40%	60	0	+	+	+	+	+	+	+				+		+	+	+	-	+	+	+	+	+
		wä	40%	80		+					+	+											+	+		
		wä	40%	100							+	+											+	+		
		wä	GL	20	+	+	+	+	+	+	+	+	-			+		+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	-			+		+	+	+	0	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+				+		+	+	+	-	+	+	+	+	+
		wä	GL	80		+					+	+											+	+		
		wä	GL	100							+	+											+	+		
1078	**amyl acetate**		TR	20	-	-	+	0	0		+	+			+	+	+	-	0	-	0	0	+	+		+
1-pentyl acetate			TR	40	-	-	+	-	-		+	+			+	+	+		-		-	-	+	+		+
acetic acid amyl ester			TR	60	-	-	+	-	-		+	+			+	+	+				-	-	+	+		+
CH3CO2C5H11			TR	80		-					+	+			+	+	+							+		+
C7H14O2			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1079	**amyl alcohol**		TR	20	+	0	+	+	+	+	+	+	-	+			+			+	+	0	+	+	+	+
1-pentanol			TR	40	+	0	+	+	+	+	+	+		0			+			+			+	+	+	+
			TR	60	0	0				+	+	+		0			+			+			+	+	+	+
CH3(CH2)4OH			TR	80		0				+	+	+					+						+	+	+	+
C5H12O			TR	100						+	+	+					+						+	+		+
			TR	120						0	+	+					+							+		+
1080	**amyl chloride**		TR	20	-	-	0			+	+	+			+	+	+		-	-			+	+	+	+
1-chloropentane			TR	40	-	-	-			+	+	+			+	+	+						+	+	+	+
1-pentyl chloride			TR	60	-	-				+	+	+			+	+	+						+	+	+	+
CH3(CH2)4Cl			TR	80		-				+	+	+			+	+	+							+	+	+
C5H11Cl			TR	100						+	+	+			+	+	+							+	+	+
1081	**amyl laurate**		TR	20	-	-					+	+			+	+	+						+	+	+	+
dodecanoic acid pentyl ester			TR	40							+	+			+	+	+						+	+	+	+
lauric acid amyl ester			TR	60							+	+			+	+	+						+	+	+	+
CH3(CH2)10CO2C5H11			TR	80							+	+			+	+	+							+	+	+
C17H34O2			TR	100							+	+			+	+	+							+	+	+
			TR	120							+	+			+	+	+							+		+
1082	**p-tert-amyl phenol**		TR	20	-					-	+	+														
4-(2-methyl-2-butyl)phenol			TR	40	-						+	+														
			TR	60	-						+	+														
CH3CH2C(CH3)2C6H4OH			TR	80							+	+														
C11H16O			TR	100							+	+														
			TR	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1083	**aniline**	wä	GL	20	-	-	0	0	0	+	+	+	-	-	+	+	+	0	+	-	+	-	+	+	+	+
aminobenzene		wä	GL	40	-	-	0	0	0	+	+	+			+	+	+	-	+	-	0	-	+	+	+	+
phenylamine		wä	GL	60	-	-					+	+			+	+	+	-		-	-	-	+	+	+	+
C6H5NH2		wä	GL	80		-					+	+			+	+	+						+	+	+	+
C6H7N		wä	GL	100							+	+			+	+	+							+	+	
			TR	20	-	-	0	0	0	+	+	+		-	+	+	+	-	-	-	+	-	+	+	+	+
			TR	40	-	-	0	0	0	0	+	+			+	+	+				0	-	+	+	+	+
			TR	60		-					+	+			+	+	+	-		-	-	-	+	+	+	+
			TR	80		-					+	+			+	+	+						+	+	+	+
			TR	100							+	+			+	+	+							+	+	+
			TR	120							+	+			+	+	+							+	+	+
1084	**aniline sulfate**		TR	20	-						+	+														
anilinium sulfate			TR	40							+	+														
			TR	60							+	+														
(C6H5NH3)2SO4			TR	80							+	+														
C12H16N2O4S			TR	100							+	+														
1085	**aniline sulfite**		TR	20	+						+	+														
anilinium sulfite			TR	40							+	+														
			TR	60							+	+														
(C6H5NH3)2SO3			TR	80							+	+														
C12H16N2O3S			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1086	**p-anisaldehyde**		TR	20	-						+	+		-	+	+	+						+	+	+	+
4-methoxybenzaldehyde			TR	40	-						+	+			+	+	+						+	+	+	+
			TR	60	-						+	+			+	+	+						+	+		+
CH3OC6H4CHO			TR	80							+	+			+	+	+							+		+
C8H8O2			TR	100							+	+			+	+	+							+		+
1087	**anisole**		TR	20	-		0	0	0		+	+		-	+	+	+	-	-	-	-	0	+	+	+	+
methoxybenzene			TR	40	-		-	-	-		+	+			+	+	+						+	+	+	+
methyl phenyl ether			TR	60	-		-	-	-		+	+			+	+	+						+	+		+
C6H5OCH3			TR	80							+	+			+	+	+							+		+
C7H8O			TR	100							+	+			+	+	+							+		+
			TR	120											+	+	+							+		+
1088	**anise oil**			20			0				+	+														
				40			0				+	+														
				60			-				+	+														
				80							+	+														
				100							+	+														
1089	**sodium thiosulfate**	wä	40% (GL)	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	40% (GL)	40	+	+	+	+	+	+	+	+			+	+	+	0	+	+	+	+	+	+	+	+
		wä	40% (GL)	60	0	+	+	+	+	+	+	+			+	+	+	-	+	+	+	+	+	+	+	+
Na2S2O3		wä	40% (GL)	80		+				+	+	+					+				+		+	+	+	
Na2O3S2		wä	40% (GL)	100						+	+	+					+				+		+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1090	**benzaldehyde oxime**	wä	2%	20	+		+	+	+		+	+			+	+	+	0	+	-	+		+	+	+	+
		wä	2%	40				+	+		+	+			+	+	+						+	+	+	+
		wä	2%	60				+	+		+	+			+	+	+						+	+	+	+
C6H5CH=NOH		wä	2%	80							+	+			+	+	+						+	+	+	+
C7H7NO		wä	2%	100							+	+			+	+	+						+	+	+	
1091	**antimony pentachloride**		TR	20	+		+			+	+	+	-	-	-	-	+						+	+		
antimony(V) chloride			TR	40						+	+	+											+	+		
			TR	60						+	+	+												+		
SbCl5			TR	80						+	+	+														
Cl5Sb			TR	100						+	+	+														
			TR	120							+	+														
1092	**antimony trichloride**	wä	90%	20	+	+	+	+		+	+	+	-	+	-	-		+	+	+	+	+				
antimony(III) chloride		wä	90%	40	+	+	+	+		+	+	+		+				+	+	+	+	+				
		wä	90%	60	+	+	+	+		+	+	+		+				+	+	+	+	+				
SbCl3		wä	90%	80		+					+	+														
Cl3Sb		wä	90%	100							+	+														
		wä	90%	120							+	+														
1093	**malic acid**	wä	GL	20	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
hydroxysuccinic acid		wä	GL	40			+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
hydroxybutanedioic acid		wä	GL	60			+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
HO2CCH2CH(OH)CO2H		wä	GL	80						+	+	+			+	+	+						+	+	+	
C4H6O5		wä	GL	100						+	+	+			+	+	+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1094	**arsenious acid**	wä	VL	20	+					+	+	+					+						+	+	+	+
		wä	VL	40							+	+					+						+	+	+	+
		wä	VL	60							+	+					+						+	+	+	+
H3AsO3		wä	VL	80							+	+											+	+	+	
H3AsO3		wä	VL	100							+	+											+	+	+	
1095	**arsenic acid**	wä	80%	20	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+
		wä	80%	40	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+
		wä	80%	60	0	+	+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+	+
H3AsO4		wä	80%	80	-	+		+		+	+	+				+	+	0	+	+	+	+	+	+	+	
H3AsO4		wä	80%	100				0		+	+	+				+	+				+	+	+	+	+	
		wä	80%	120							+	+														
1096	**arsenic sulfides**		TR	20	+					+	+	+														
			TR	40						+	+	+														
			TR	60						+	+	+														
As4Sx (x = 3,4,5,6,10)			TR	80						+	+	+														
As4Sx			TR	100						+	+	+														
			TR	120							+	+														
1097	**arsenic trioxide**		TR	20	+					+	+	+														
arsenic(III) oxide			TR	40						+	+	+														
arsenious acid anhydride			TR	60						+	+	+														
			TR	80						+	+	+														
As2O3			TR	100						+	+	+														
			TR	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1098	**L(+)-ascorbic acid**	wä	GL	20	+		+	+	+	+	+	+					+		+		+		+	+	+	+
vitamin C		wä	GL	40	+		+	+	+	+	+	+					+						+	+	+	+
		wä	GL	60	0			+	+		+	+					+						+	+	+	+
		wä	GL	80													+						+	+	+	
C6H8O6		wä	GL	100													+						+	+	+	
1099	**ammonium dihydrogenphosphate**	wä	GL	20	+	+	+	+	+	+	+	+		+				+	+	+	+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+				0	+	+	+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+				-	+		+		+	+	+	+
NH4H2PO4		wä	GL	80		+		+	+	+	+	+							+		+		+	+		
H6NO4P		wä	GL	100						+	+	+											+	+		
1100	**barium carbonate**	wä	GL	20	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+				+	+	+	+	+	+	+	+	+		+
BaCO3		wä	GL	80		+				+	+	+					+	-	+	0	+	-	+	+		
CBaO3		wä	GL	100						+	+	+					+						+	+		
1101	**barium chloride**	wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+		+			+	0	+	+	+	+	+	+	+	+
		wä	GL	80		0				+	+	+					+	-	+	0	+	-	+	+	+	
BaCl2		wä	GL	100						+	+	+					+						+	+	+	
1102	**barium cyanide**	wä	GL	20	+		+	+	+		+	+	+	+		+	+	+	+	0	+	+	+	+	+	+
		wä	GL	40	+		+	+	+		+	+		+		+	+	0	+	0	0	+	+	+	+	+
		wä	GL	60			+	+			+	+				+	+	-	+		-	+	+	+	+	+
Ba(CN)2		wä	GL	80							+	+					+						+	+	+	
C2BaN2		wä	GL	100							+	+					+							+	+	

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1103	**barium hydroxide**	wä	GL	20	+	+	+	+	+	0	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	-	+	+		+			+		+	+	0	0	+	+	+	+
		wä	GL	60	0	+	+	+		-	+	+					+		+	+	0	-	+	+	+	0
Ba(OH)2		wä	GL	80		+				-	+	+					+		+		-		+	+	+	
H2BaO2		wä	GL	100							+	+					+						+	+	+	
1104	**barium nitrate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+		+	+	+	+		+	0	+	+	+	+
Ba(NO3)2		wä	GL	80		+					+	+					+	0	+		+		+	+	+	
BaN2O6		wä	GL	100							+	+					+						+	+	+	
1105	**barium peroxide**	wä	GL	20	+		+	+	+		+	+	+			+	+	+	+		+	+	+	+		+
		wä	GL	40			+	+	+		+	+	+			+	+		+		+	+	+	+		+
		wä	GL	60			+	+	+		+	+				+	+		+		+	0	+	+		
		wä	GL	80							+	+							+		+		+	+		
BaO2		wä	GL	100							+	+												+		
1106	**barium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+
baryta white		wä	GL	40	+	+	+	+	+	+	+	+	+	+		+	+	+	+	0	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+
BaSO4		wä	GL	80		+		+	+	+	+	+		+			+	0	+		+	0	+	+	+	
BaO4S		wä	GL	100						+	+	+					+						+	+	+	
1107	**barium sulfide**	wä	GL	20	+	+	+	+	+		+	+	+			+	+	+	+		+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+		+	+	+			+	+		+		+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+		+	+				+	+		+		0	+	+	+		+
		wä	GL	80		+					+	+							+			0	+	+		
BaS		wä	GL	100							+	+											+	+		

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1110	**benzal chloride**		TR	20	-	-					+	+	-	-	+	+	+						+	+		+
benzylidene chloride			TR	40	-	-					+	+			+	+	+						+	+		+
a,a-dichlorotoluene			TR	60	-	-					+	+			+	+	+						+	+		+
C6H5CHCl2			TR	80		-					+	+			+	+	+							+		+
C7H6Cl2			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1111	**benzaldehyde**	wä	GL	20	-	-	+	+	+	+	+	+		-	+	+	+	0		-	+	-	+	+	+	+
		wä	GL	40	-	-	+	+	+	+	+	+			+	+	+	0			+		+	+	+	+
		wä	GL	60	-	-	+	0	0		+	+			+	+	+	0			+		+	+	+	+
C6H5CHO		wä	GL	80		-					+	+			+	+	+						+	+	+	+
C7H6O		wä	GL	100							+	+			+	+	+						+	+	+	
1112	**benzamide**	wä	GL	20	+		+	+	+		+	+			+	+	+						+	+	+	+
benzoic acid amide		wä	GL	40	+		+	+	+		+	+			+	+	+						+	+	+	+
		wä	GL	60	0		+	+	+		+	+			+	+	+						+	+	+	+
C6H5CONH2		wä	GL	80							+	+			+	+	+						+	+	+	+
C7H7NO		wä	GL	100							+	+			+	+	+						+	+	+	
1113	**gasoline, free of lead and aromatics**			20	+	-	+	0	0	+	+	+	+		+	+	+	+	-	-	+	0	+	+	+	+
				40	+	-	+	0	0	+	+	+	+		+	+	+	+			+	-	+	+	+	+
				60	+	-	0	-	-	+	+	+			+	+	+				+		+	+	+	+
C5H12 bis C12H26				80		-		-	-	+	+	+			+	+	+						+	+	+	+
				100						+	+	+			+	+	+						+	+	+	+

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1114	**gasoline, Super**			20	+	-	+	0	0	+	+	+	+	0	+	+	+	+	-	-	+	0	+	+	+	+
				40	+	-	+	0	0	+	+	+			+	+	+				+	-	+	+	+	+
				60		-	0	-	-	+	+	+			+	+	+				+		+	+	+	+
				80		-				+	+	+			+	+	+						+	+	+	+
				100						+	+	+			+	+	+						+	+	+	+
1115	**petrol-benzene mixture**			20	-	-	0	0	0		+	+		-	+	+	+	+	-	-	+	0	+	+	+	+
				40	-	-	-	-	-		+	+			+	+	+				+	-	+	+	+	+
				60	-	-	-	-	-		+	+			+	+	+				+		+	+	+	+
				80		-					+	+			+	+	+						+	+	+	+
				100							+	+			+	+	+						+	+	+	+
				120							+	+														
1116	**benzoic acid**	wä	GL	20	+	+	+	+	+		+	+	-	-	+	+	+	-	-	-	+	-	+	+	+	+
benzenecarboxylic acid		wä	GL	40	+		+	+	+		+	+	-		+	+	+				+		+	+	+	+
phenylformic acid		wä	GL	60	0		+	+	+		+	+			+	+	+				+		+	+	+	+
C6H5CO2H		wä	GL	80		-		+	+		+	+			+	+	+				+		+	+	+	+
C7H6O2		wä	GL	100							+	+			+	+	+				0		+	+	+	
1117	**benzene**		TR	20	-	-	0	0	0	+	+	+		-	+	+	+	0	-	-	+	-	+	+		+
			TR	40	-	-	-	-	-	+	+	+			+	+	+		-	-		-	+	+		+
			TR	60	-	-	-	-	-	0	+	+			+	+	+		-	-		-	+	+		+
			TR	80						-	+	+			+	+	+		-	-		-	+	+		+
C6H6																										

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Partner for Solutions

Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1118	**benzoic anhydride**		TR	20	+		+	+	+		+	+														
benzoic acid anhydride			TR	40				+	+		+	+														
			TR	60				+	+		+	+														
(C6H5CO)2O			TR	80							+	+														
C14H10O3			TR	100							+	+														
1119	**sodium benzoate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
benzoic acid sodium salt		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+	+	+	+	+	+	0	+		+	0	+	+	+	+
C6H5CO2Na		wä	GL	80		+				+	+	+					+		0		0		+	+	+	
C7H5NaO2		wä	GL	100						0	+	+					+						+	+	+	
1120	**benzenesulfonic acid**	wä	10%	20	+		+	+	+	+	+	+					+	0		0		0	+	+	+	+
phenylsulfonic acid		wä	10%	40	+		+	+	+	+	+	+					+	-		-			+	+	+	+
		wä	10%	60	+		+	+	+		+	+											+	+	+	+
C6H5SO3H		wä	10%	80							+	+											+	+	+	
C6H6O3S		wä	10%	100							+	+												+		
		wä	40%	20	+		+	+	+	+	+	+					+	0		0		0	+	+	+	+
		wä	40%	40	+		+	+	+	+	+	+					+	-		-			+	+	+	+
		wä	40%	60	+		+	+	+		+	+											+	+	+	+
		wä	40%	80							+	+											+	+	+	
		wä	40%	100							+	+												+		
		wä	GL	20			+	+	+	+	+	+					+	0		0		0	+	+	+	+
		wä	GL	40			+	+	+	+	+	+					+	-		-			+	+	+	+
		wä	GL	60			+	+	+		+	+											+	+	+	+
		wä	GL	80							+	+											+	+	+	
		wä	GL	100							+	+												+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1121	**benzoyl chloride**		TR	20	-	-	0	0	0	+	+	+	-	-			+						+	+	+	+
benzoic acid chloride			TR	40	-		0				+	+					+						+	+	+	+
			TR	60	-		0				+	+					+						+	+	+	+
C6H5COCl			TR	80							+	+					+						+	+	+	
C7H5ClO			TR	100							+	+					+						+	+		
			TR	120							+	+														
1122	**benzyl alcohol**		TR	20	0		+	+	+	+	+	+		-	+	+	+	-	0		+	0	+	+	+	+
			TR	40	-		+	+	+	+	+	+			+	+	+					0	+	+	+	+
			TR	60			+	0	0	+	+	+			+	+	+					0	+	+	+	+
C6H5CH2OH			TR	80						+	+	+			+	+	+					-	+	+	+	+
C7H8O			TR	100						0	+	+			+	+	+							+	+	+
			TR	120							+	+			+	+	+							+	+	+
1123	**benzyl chloride**		TR	20	-	-	-	-	-	+	+	+		-	+	+	+		-	-			+	+	+	+
a-chlorotoluene			TR	40	-	-	-			+	+	+			+	+	+						+	+	+	+
			TR	60	-	-	-	-	-	0	+	+			+	+	+						+	+	+	+
C6H5CH2Cl			TR	80						0	+	+			+	+	+						+	+	+	+
C7H7Cl			TR	100				-	-		+	+			+	+	+							+	+	+
			TR	120							+	+			+	+	+							+	+	+
1124	**N-benzyl-N-ethylaniline**		TR	20	-		-	-	-		+	+														
N-ethyl-N-phenylbenzylamine			TR	40							+	+														
N-benzyl-N-ethylphenylamine			TR	60							+	+														
C6H5CH2N(C6H5)C2H5			TR	80							+	+														
C15H17N			TR	100							+	+														
			TR	120							+	+														

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1125	**succinic acid**	wä	GL	20	+		+	+	+	+	+	+	-		+	+	+	-	+	+	+	+	+	+	+	+
butanedioic acid		wä	GL	40	+		+	+	+	+	+	+	-		+	+	+	-	+	+	+	+	+	+	+	+
ethane-1,2-dicarboxylic acid		wä	GL	60	+		+	+	+	+	+	+			+	+	+		+	+	+	+	+	+	+	+
HO2CCH2CH2CO2H		wä	GL	80							+	+			+	+	+						+	+	+	
C4H6O4		wä	GL	100							+	+			+	+	+							+	+	
1126	**beryllium chloride**	wä	GL	20	+		+	+	+		+	+					+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+		+	+					+		+		+		+	+	+	+
		wä	GL	60			+	+	+		+	+					+						+	+	+	+
		wä	GL	80							+	+					+						+	+	+	
BeCl2		wä	GL	100							+	+					+						+	+	+	
1127	**beryllium fluoride**	wä	GL	20	+		+	+	+		+	+					+						+	+	+	+
		wä	GL	40							+	+					+						+	+	+	+
		wä	GL	60							+	+					+						+	+	+	+
		wä	GL	80							+	+					+						+	+		
BeF2		wä	GL	100							+	+											+	+		
1128	**beryllium sulfate**	wä	GL	20	+		+				+	+														
		wä	GL	40	+		+				+	+														
		wä	GL	60	+		+				+	+														
BeSO4		wä	GL	80							+	+														
BeO4S		wä	GL	100							+	+														
1129	**beer**			20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
				40	+	+	+	+	+	+	+	+	+	+	+	+	+		+		+		+	+	+	+
				60	+	+	+	+	+	+	+	+		+	+	+	+		+		+		+	+	+	+
				80		+		+	+	+	+	+		+	+	+	+				+		+	+	+	+
				100							+	+			+	+	+						+	+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1130	**beer colour**			20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+		+	+	+
				40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+		+	+	+
				60	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+		+	+	+
				80							+	+			+	+	+							+	+	+
				100							+	+			+	+	+							+	+	+
				120							+	+			+	+	+							+		
1131	**bisulfite lye**	wä	GL	20	+		+	+	+	+	+	+		+		+	+	0	+	+	0	0	+	+	+	+
hydrogensulfite lye		wä	GL	40	+		+	+	+		+	+				+	+	-	+	+	0	0	+	+	+	+
		wä	GL	60	+		+	+	+		+	+					+						+	+	+	+
NaHSO3 + SO2		wä	GL	80							+	+					+						+	+		
HO3SNa + O2S		wä	GL	100							+	+					+							+		
1132	**hydrogen cyanide**	gf	TR	20	+		+	+	+	+	+	+			+	+	+	0	0	0	+	+	+	+	+	+
hydrocyanic acid		gf	TR	40	+		+	+	+	+	+	+						-	-	-	0	0	+	+	+	+
		gf	TR	60	0		+	+	+	+	+	+											+	+	+	+
HCN		gf	TR	80						+	+	+												+	+	+
CHN		gf	TR	100						+	+	+												+	+	+
		gf	TR	120							+	+												+	+	+

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1133	**lead(II) acetate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
(CH3COO)2Pb		wä	10%	80		+				+	+	+			+	+	+						+	+	+	
C4H6O4Pb		wä	10%	100						+	+	+			+	+	+						+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+				+	+	+			+	+	+						+	+	+	
		wä	GL	100						+	+	+											+	+	+	
			TR	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+			
			TR	40	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+			
			TR	60	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+			
			TR	80		+				+	+	+			+	+	+						+			
			TR	100						+	+	+											+			
			TR	120							+	+														
1134	**lead(II) hydrogenarsenate**	wä	GL	20	+		+	+	+		+	+														+
lead arsenate		wä	GL	40							+	+														+
		wä	GL	60							+	+														+
PbHAsO4		wä	GL	80							+	+														
HAsPbO4		wä	GL	100							+	+														
1135	**lead(II) carbonate**	wä	GL	20	+		+	+	+		+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+		+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60			+	+	+		+	+					+	+	+	+	+	+	+	+	+	+
PbCO3		wä	GL	80							+	+					+	+	+	+	+	-	+	+	+	
CO3Pb		wä	GL	100							+	+					+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1137	**lead(II) chloride**	wä	GL	20	+	+	+	+	+		+	+		+			+				+		+	+	+	+
		wä	GL	40	+	+	+	+	+		+	+		+			+				+		+	+	+	+
		wä	GL	60		+	+	+	+		+	+		+			+				+		+	+	+	+
PbCl2		wä	GL	80		+					+	+					+						+	+	+	
Cl2Pb		wä	GL	100							+	+					+						+	+	+	
1138	**lead(II) nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+				+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+				+		+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+					+				+		+	+	+	+
Pb(NO3)2		wä	GL	80		+				+	+	+					+						+	+	+	
N2O6Pb		wä	GL	100						+	+	+					+						+	+	+	
1139	**lead(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
PbSO4		wä	GL	80		+		+	+	+	+	+					+	+	+	+	+	0	+	+	+	
O4PbS		wä	GL	100							+	+					+						+	+	+	
1142	**boric acid**	wä	VL	20	+		+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	40	+		+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	60	0		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	80				+	+	+	+	+		+	+	+	+		+		+		+	+	+	
H3BO3		wä	VL	100						+	+	+					+				+		+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+		+	+		+	+	+	+		+		+		+	+	+	
		wä	GL	100							+	+		+	+	+	+				+		+	+	+	

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1143	**boron trichloride**	gf	TR	20	+						+	+											+			
trichloroborane		gf	TR	40							+	+											+			
		gf	TR	60							+	+											+			
		gf	TR	80							+	+														
BCl3		gf	TR	100							+	+														
1144	**boron trifluoride**	gf	TR	20	+		+			+	+	+											+			
trifluoroborane		gf	TR	40	+		+			+	+	+											+			
		gf	TR	60			-			+	+	+											+			
		gf	TR	80						+	+	+														
BF3		gf	TR	100						+	+	+														
1145	**1-bromo-2-chloroethane**		TR	20	-	-	-	-	-	+	+	+			+	+	+						+	+		+
			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
ClCH2CH2Br			TR	80							+	+			+	+	+							+		
C2H4BrCl			TR	100							+	+			+	+	+							+		
1146	**bromine vapours**		HK	20	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+	-	+
			HK	40						+	+	+											+	+		+
			HK	60						+	+	+												+		+
			HK	80						+	+	+														
Br2			HK	100						0	+	+														
1147	**bromoethane**		TR	20	-	-	0	-	-	+	+	+		-	+	+	+	-	-	-	0	0	+	+	+	+
ethyl bromide			TR	40			0			+	+	+					+						+	+	+	+
CH3CH2Br																										
C2H5Br																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1148	**bromine**	fl	TR	20	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+	-	+
		fl	TR	40		-				+	+	+											+			+
Br2																										
1149	**bromoform**		TR	20	-		-	-	-	-	+	+														
tribromomethane			TR	40	-		-				+	+														
			TR	60	-		-	-	-		+	+														
			TR	80							+	+														
CHBr3			TR	100				-	-		+	+														
			TR	120							+	+														
1150	**bromine, aqueous solution**	wä	VL	20	+		0	0	0	+	+	+						-	-	-	+	-	+	+		+
		wä	VL	40	0		-	-	-	+	+	+									+		+			
		wä	VL	60	-		-	-	-	+	+	+									+		+			
		wä	VL	80						+	+	+														
Br2		wä	VL	100							+	+														
		wä	GL	20	+		-	-	-	+	+	+	-	-				-	-	-	+	-	+	+		+
		wä	GL	40	0		-	-	-	+	+	+									+		+	+		+
		wä	GL	60	-		-	-	-	+	+	+									+		+			
		wä	GL	80						+	+	+														
		wä	GL	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1151	**hydrobromic acid**	wä	10%	20	+		+	+	+	+	+	+		+	-	-	-	-	+	+	+	+	+	+	+	+
		wä	10%	40	+		+	+	+	+	+	+		+				-	+	+	+	+	+	+	+	+
		wä	10%	60	+		+	+		+	+	+							0	0	+	+	+	+	+	
		wä	10%	80						+	+	+											+	+	+	
HBr		wä	10%	100						+	+	+														
		wä	48%	20	+		+	+	+	+	+	+		-	-	-	-	-	+	+	+	+	+	+	+	+
		wä	48%	40	+		+	+		+	+	+						-	+	+	+	+	+	+	+	+
		wä	48%	60	+		+	0		+	+	+							0	0	+	+	+	+	+	
		wä	48%	80						+	+	+							-	-	0	0	+	+	+	
		wä	48%	100						+	+	+									-	-				
1152	**1,3-butadiene**	gf	HK	20	+		0	0	0	+	+	+			+	+		-	-	-	0		+			
		gf	HK	40	+		-	-	-	+	+	+			+	+							+			
		gf	HK	60	0					+	+	+			+	+							+			
CH2=CHCH=CH2		gf	HK	80						+	+	+														
C4H6		gf	HK	100						+	+	+														
1153	**1,4-butanediol**	wä	10%	20	+		+	+	+		+	+	-		+	+	+		+	+	+	+	+	+	+	+
tetramethylene glycol		wä	10%	40	0		+	+	+		+	+			+	+	+		+		+	+	+	+	+	+
		wä	10%	60	-		+	+	+		+	+			+	+	+		+			+	+	+	+	+
HO(CH2)4OH		wä	10%	80							+	+			+	+	+						+	+	+	+
C4H10O2		wä	10%	100							+	+			+	+	+							+	+	
			TR	20	0		+	+	+		+	+	-		+	+	+		+	+	+	0	+	+	+	+
			TR	40	-		+	+	+		+	+			+	+	+		+		+	-	+	+	+	+
			TR	60			+	+	+		+	+			+	+	+		+				+	+	+	+
			TR	80							+	+			+	+	+						+	+	+	+
			TR	100							+	+			+	+	+							+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1154	**butane**	gf	HK	20	+		+	+	+	+	+	+			+	+	+	+	-	-	+	0	+			
		gf	HK	40				+	+	+	+	+			+	+	+						+			
		gf	HK	60				+	+	+	+	+			+	+	+						+			
		gf	HK	80							+	+			+	+	+						+			
C4H10		gf	HK	100							+	+			+	+	+						+			
1155	**1-butanol**		TR	20	+	0	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
butyl alcohol			TR	40	+		+	+	+	+	+	+			+	+	+	+	+	+		+	+	+	+	+
			TR	60	0		+	0	0	+	+	+			+	+	+	-	+	0		+	+	+	+	+
CH3(CH2)3OH			TR	80				0	0	+	+	+			+	+	+		0			+	+	+	+	+
C4H10O			TR	100						0	+	+			+	+	+						+	+	+	+
			TR	120							+	+			+	+	+									
1156	**1-butanethiol**		TR	20	+		0	+	+	+	+	+			+	+	+	+	+	+	+	+		+	+	+
1-butyl mercaptan			TR	40	+		0	0	0	+	+	+			+	+	+	+	+	+	+	+		+	+	+
			TR	60	+		-			+	+	+			+	+		+	0	0	0	+		+	+	+
CH3(CH2)3SH			TR	80						+	+	+			+	+								+	+	+
C4H10S			TR	100							+	+			+	+								+	+	+
1157	**1-butene**	gf	HK	20	+		-	-	-	+	+	+			+	+	+	+	0	+	+	0				
butylene		gf	HK	40			-	-	-	+	+	+			+	+	+									
		gf	HK	60				-	-	+	+	+			+	+	+									
CH3CH2CH=CH2		gf	HK	80				-	-	+	+	+			+	+	+									
C4H8		gf	HK	100				-	-	+	+	+			+	+	+									

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1158	**1-butyne**	gf	HK	20			+				+	+														
		gf	HK	40			+				+	+														
		gf	HK	60							+	+														
CH3CH2CCH		gf	HK	80							+	+														
C4H6		gf	HK	100							+	+														
1159	**butyric acid**	wä	20%	20	+	-	+	+	+	+	+	+			+	+	+	-	+	+	0	0	+	+	+	+
butanoic acid		wä	20%	40	0	-	+			+	+	+			+	+	+						+	+	+	+
		wä	20%	60	-	-	0			+	+	+			+	+	+						+	+	+	+
CH3CH2CH2CO2H		wä	20%	80		-				+	+	+			+	+	+							+	+	
C4H8O2		wä	20%	100						+	+	+			+	+	+							+		
			TR	20	+	-	+	+	+	+	+	+			+	+	+	-	0	0	0	0	+	+	+	+
			TR	40	0	-	+			+	+	+			+	+	+						+	+	+	+
			TR	60	-	-	0			+	+	+			+	+	+						+	+	+	+
			TR	80		-				+	+	+			+	+	+							+	+	
			TR	100						0	+	+			+	+	+							+		
1160	**butyl acetate**		TR	20	-	-	0	-	-		+	+	-	-	+	+	+	-	-	-	-	0	+	+		+
acetic acid butyl ester			TR	40			0	-	-		+	+		-	+	+	+	-	-	-	-	-	+	+		+
			TR	60			-	-	-		+	+		-	+	+	+						+	+		+
CH3CO2(CH2)3CH3			TR	80							+	+		-	+	+	+							+		+
C6H12O2			TR	100							+	+		-	+	+	+							+		+
1161	**butylamine**		TR	20		-				+	+	+	-		+	+	+	-			-		+	+	+	+
1-aminobutane			TR	40		-				0	+	+			+	+	+						+	+	+	+
			TR	60		-				-	+	+			+	+	+						+	+	+	+
CH3(CH2)3NH2			TR	80		-					+	+			+	+	+							+	+	+
C4H11N																										

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1162	**butyl bromide**		TR	20	-	-	-	-	-	+	+	+	-	-	+	+	+						+	+	+	+
1-bromobutane			TR	40						+	+	+			+	+	+						+	+	+	+
			TR	60						+	+	+			+	+	+						+	+	+	+
CH3(CH2)3Br			TR	80						+	+	+			+	+	+						+	+	+	+
C4H9Br			TR	100						+	+	+			+	+	+							+		+
1163	**butyl chloride**		TR	20	-					+	+	+														
1-chlorobutane			TR	40						+	+	+														
			TR	60						+	+	+														
CH3(CH2)3Cl			TR	80						+	+	+														
C4H9Cl			TR	100						+	+	+														
			TR	120							+	+														
1164	**4-tert-butylphenol**		TR	20	0		0	+	+	+	+	+					+	-	-	-	0	-				
			TR	40	-					+	+	+														
			TR	60						+	+	+														
(CH3)3CC6H4OH			TR	80						+	+	+														
C10H14O			TR	100							+	+														
			TR	120							+	+														
1165	**butyl phosphate**		TR	20	-	-				-	+	+												+		+
phosphoric acid butyl ester			TR	40							+	+												+		+
			TR	60							+	+												+		+
C4H9OPO(OH)2			TR	80							+	+												+		+
C4H11O4P			TR	100							+	+												+		+
			TR	120							+	+												+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1166	**cadmium acetate**	wä	GL	20	+	+	+	+	+		+	+					+						+	+	+	+
		wä	GL	40	+	+	+	+	+		+	+					+						+	+	+	+
		wä	GL	60		+	+	+	+		+	+					+						+	+	+	+
(CH3CO2)2Cd		wä	GL	80		+					+	+					+						+	+	+	
C4H6CdO4		wä	GL	100							+	+					+							+	+	
1167	**cadmium chloride**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+				+	+	+			+	+	+	0	+	0	+	+	+	+	+	
CdCl2		wä	GL	100						+	+	+			+	+	+		0		+	+	+	+	+	
1168	**cadmium cyanide**	wä	GL	20	+		+	+	+	-	+	+							+				+	+	+	+
		wä	GL	40	+		+	+	+	-	+	+											+	+	+	+
		wä	GL	60			+	+			+	+											+	+	+	+
Cd(CN)2		wä	GL	80							+	+											+	+	+	
C2CdN2		wä	GL	100							+	+												+		
1169	**cadmium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+				+		+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+						+	+	+	+
CdSO4		wä	GL	80		+				+	+	+					+						+	+	+	
CdO4S		wä	GL	100							+	+					+						+	+	+	
1170	**calcium acetate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+		+				+	+	+	+
(CH3CO2)2Ca		wä	GL	80		+				+	+	+					+						+	+	+	
C4H6CaO4		wä	GL	100						+	+	+					+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1171	**calcium arsenate**	wä	GL	20	+		+	+	+	+	+	+		+			+		+				+	+	+	+
calcium othoarsenate		wä	GL	40	+		+	+	+	+	+	+		+			+		+				+	+	+	+
		wä	GL	60			+	+		+	+	+					+		+				+	+	+	+
Ca3(AsO4)2		wä	GL	80						+	+	+					+						+	+	+	
As2Ca3O8		wä	GL	100							+	+					+						+	+	+	
1172	**calcium benzoate**	wä	GL	20	+		+	+	+	+	+	+					+						+	+	+	+
benzoic acid calcium salt		wä	GL	40			+	+	+	+	+	+					+						+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+						+	+	+	+
(C6H5CO2)2Ca		wä	GL	80						+	+	+					+						+	+	+	
C14H10CaO4		wä	GL	100							+	+					+						+	+	+	
1173	**calcium bromide**	wä	GL	20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+		+			+		+		+		+	+	+	+
CaBr2		wä	GL	80						+	+	+					+						+	+	+	
Br2Ca		wä	GL	100							+	+					+						+	+	+	
1174	**calcium carbide**		TR	20			+	+	+		+	+														
calcium acetylide			TR	40			+	+	+		+	+														
carbide			TR	60			+	+			+	+														
CaC2			TR	80							+	+														
C2Ca			TR	100							+	+														
			TR	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1175	**calcium carbonate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
lime		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
CaCO3		wä	GL	80		+		+	+	+	+	+					+		+				+	+	+	
CCaO3		wä	GL	100						+	+	+					+						+	+	+	
1176	**calcium chlorate**	wä	GL	20	+	+	+	+	+	+	+	+											+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+											+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+											+	+	+	+
Ca(ClO3)2		wä	GL	80		+				+	+	+											+	+	+	
CaCl2O6		wä	GL	100						+	+	+														
1177	**calcium chloride**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+		+			+	0	+	0	+		+	+	+	+
CaCl2		wä	GL	100						+	+	+		+			+		0		+		+	+	+	+
1178	**calcium chromate**	wä	GL	20	+						+	+											+	+	+	+
chromatite		wä	GL	40							+	+											+	+	+	+
		wä	GL	60							+	+											+	+	+	+
		wä	GL	80							+	+											+	+	+	
CaCrO4		wä	GL	100							+	+											+	+	+	
1179	**calcium fluoride**	wä	GL	20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
fluorspar		wä	GL	40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60			+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	80						+	+	+											+	+	+	
CaF2		wä	GL	100							+	+											+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1180	**calcium hydrogencarbonate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
calcium bicarbonate		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+	0	0	0	+	+	+	+	+	+
Ca(HCO3)2		wä	GL	80		+				+	+	+					+						+	+	+	
C2H2CaO6		wä	GL	100							+	+					+						+	+	+	
1181	**calcium hydrogensulfide**	wä	GL	20	+		+	+	+	+	+	+					+						+	+	+	+
		wä	GL	40			+	+	+	+	+	+					+						+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+						+	+	+	+
Ca(SH)2		wä	GL	80						+	+	+											+	+	+	
H2CaS2		wä	GL	100						+	+	+											+	+	+	
1182	**calcium hydroxide**	wä	GL	20	+	+	+	+	+	0	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
lime milk		wä	GL	40	+	+	+	+	+	0	+	+		+	+	+	+	+	+	+	0	+	+	+	+	+
slaked lime		wä	GL	60	+	+	+	+	+	0	+	+		+	+	+	+	0	+	+	0	+	+	+	+	+
Ca(OH)2		wä	GL	80		+		+		-	+	+			+	+	+		+		0	+	+	+	+	
H2CaO2		wä	GL	100						-	+	+					+				0	+	+	+	+	
1183	**calcium hypochlorite**	wä	GL	20	+		+	+	+	+	+	+	0		+	+	+	+	+	-	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+	0		+	+	+		+		+	+	+	+	+	+
		wä	GL	60			+	+	+	0	+	+			0	0	+		+		+	0	+	+	+	+
Ca(OCl)2		wä	GL	80						0	+	+					+				+		+	+	+	
CaCl2O2		wä	GL	100							+	+					+						+	+	+	
1184	**calcium nitrate**	wä	50%	20	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+
		wä	50%	40	+	+	+	+	+	+	+	+	+	+		0	+	+	+	+	+	+	+	+	+	+
		wä	50%	60		+	+	+	+	+	+	+		+			+		+		+	+	+	+	+	+
Ca(NO3)2		wä	50%	80		+				+	+	+		+			+				+		+	+	+	
CaN2O6		wä	50%	100						+	+	+					+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1185	**calcium oxalate**		TR	20	+						+	+														
oxalic acid calcium salt			TR	40							+	+														
			TR	60							+	+														
CaC2O4			TR	80							+	+														
C2CaO4			TR	100							+	+														
1186	**calcium permanganate**	wä	VL	20	+						+	+														
		wä	VL	40							+	+														
		wä	VL	60							+	+														
Ca(MnO4)2		wä	VL	80							+	+														
CaMn2O8		wä	VL	100							+	+														
1187	**calcium peroxide**	wä	GL	20	+						+	+														
		wä	GL	40	+						+	+														
		wä	GL	60	+						+	+														
		wä	GL	80							+	+														
CaO2		wä	GL	100							+	+														
1188	**calcium dihydrogenphosphate**	wä	GL	20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+				+		+	+	+	+
Ca(H2PO4)2		wä	GL	80						+	+	+					+						+	+	+	
H4CaO8P2		wä	GL	100						+	+	+					+						+	+	+	
1189	**calcium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
gypsum		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
CaSO4		wä	GL	80		+		+	+	+	+	+					+				+		+	+	+	+
CaO4S		wä	GL	100						+	+	+					+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1190	**calcium sulfide**	wä	GL	20	+		+	+	+	0	+	+					+						+	+	+	+
		wä	GL	40	+		+	+	+	0	+	+					+						+	+	+	+
		wä	GL	60			+	+	+		+	+					+						+	+		+
		wä	GL	80							+	+											+	+		
CaS		wä	GL	100							+	+											+	+		
1191	**calcium sulfite**	wä	GL	20	+		+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+				+		+	+	+	+
CaSO3		wä	GL	80						+	+	+					+						+	+	+	
CaO3S		wä	GL	100							+	+					+						+	+	+	
1192	**calcium hydrogensulfite**	wä	GL	20	+	+	+	+	+		+	+					+				+		+	+	+	+
calcium bisulfite		wä	GL	40	+		+	+	+		+	+					+				+		+	+	+	+
		wä	GL	60			+	+	+		+	+					+						+	+	+	+
Ca(HSO3)2		wä	GL	80							+	+					+						+	+	+	
H2CaO6S2		wä	GL	100							+	+					+						+	+	+	
1193	**(+/-)-camphor**		TR	20	-	-	-	0	0	+	+	+			+	+	+		-	0	+	-	+			
			TR	40						+	+	+			+	+	+						+			
			TR	60						+	+	+			+	+	+						+			
			TR	80							+	+			+	+	+						+			
C10H16O			TR	100							+	+			+	+	+						+			
1194	**camphor oil**			20	-	-	-	-	-	+	+	+			+	+	+	-	-	0	+	0	+	+	+	+
				40						+	+	+			+	+	+						+	+	+	+
				60							+	+			+	+	+						+	+	+	+
				80							+	+			+	+	+						+	+	+	+
				100							+	+			+	+	+						+	+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1195	**e-caprolactam**		TR	20		-																				
hexahydro-2H-azepin-2-one			TR	40		-																				
			TR	60		-																				
			TR	80		-																				
C6H11NO																										
1196	**e-caprolactone**		TR	20	-	-					+	+			+	+	+							+		+
6-hydroxyhexanoic acid lactone			TR	40							+	+			+	+	+							+		+
6-hexanolide			TR	60							+	+			+	+	+							+		+
			TR	80							+	+			+	+	+							+		+
C6H10O2			TR	100							+	+			+	+	+							+		+
1197	**carbazole**		TR	20			+	+	+		+	+														
dibenzo[b,d]pyrrole			TR	40			+	+	+		+	+														
9-azafluorene			TR	60			+	+	+		+	+														
			TR	80							+	+														
C12H9N			TR	100							+	+														
1198	**carbolineum**			20	+		+	+	+	+	+	+				+		+	+	+	+	+				
				40							+	+														
				60							+	+														
				80							+	+														
				100							+	+														
1199	**carbon disulfide**		TR	20	0	-	0	-	-	+	+	+	+	-	+	+	+	-	-	-	+	-	+	+	+	+
			TR	40	-	-	-	-	-	+	+	+	0		+	+	+						+	+	+	+
CS2																										

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1200	**Caro's acid**	wä	VL	20	+		-	-	-	+	+	+											+	+		+
peroxosulfuric acid		wä	VL	40							+	+											+	+		+
peroxomonosulfuric acid		wä	VL	60							+	+											+	+		+
H2SO5		wä	VL	80							+	+												+		
H2O5S		wä	VL	100							+	+												+		
1201	**quinine**		TR	20	+		+	+	+		+	+														
			TR	40			+	+	+		+	+														
			TR	60			+	+	+		+	+														
			TR	80							+	+														
C20H24N2O2			TR	100							+	+														
1202	**quinoline**		TR	20	-		-	-	-	-	+	+														
1-azanaphthalene			TR	40							+	+														
			TR	60							+	+														
			TR	80							+	+														
C9H7N			TR	100							+	+														
1204	**chloroacetaldehyde**		TR	20	-						+	+											+			
chloroethanal			TR	40							+	+											+			
			TR	60							+	+											+			
ClCH2CHO			TR	80							+	+														
C2H3ClO			TR	100							+	+														
1205	**chloroacetone**		TR	20	-						+	+	-		+	+	+	-			0	-	+	+	+	+
1-chloro-2-propanone			TR	40							+	+			+	+	+				0		+	+	+	+
monochloroacetone			TR	60							+	+			+	+	+				0			+	+	+
ClCH2COCH3			TR	80							+	+			+	+	+							+	+	
C3H5ClO			TR	100							+	+			+	+	+							+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1206	**chloral hydrate**		TR	20	-		+	0	0	-	+	+						-	0	0	0	+				
trichloroacetaldehyde hydrate			TR	40			+	0	0		+	+						-	0	0	0	+				
			TR	60			+	-	-		+	+							0	-	0	+				
CCl3CH(OH)2			TR	80							+	+														
C2H3Cl3O2			TR	100				-	-		+	+														
1207	**chloramine B**	wä	VL	20	+		+	+	+		+	+			+	+	+	+	+	+	-	+	+	+	+	+
N-chlorobenzenesulfonic acid amide sodium sal		wä	VL	40							+	+			+	+	+						+	+	+	+
		wä	VL	60							+	+			+	+	+						+	+	+	+
C6H5SO2N(Cl)Na		wä	VL	80							+	+					+							+	+	+
C6H5ClNNaO2S		wä	VL	100							+	+					+							+	+	
1208	**chlorobenzene**		TR	20	-	-	0	0	0	+	+	+	-	-	+	+	+	-	-	-	-	-	+	+	+	+
monochlorobenzene			TR	40	-	-	-	-	-	+	+	+		-	+	+	+							+	+	+
			TR	60	-	-	-	-	-	+	+	+		-	+	+	+							+	+	+
C6H5Cl			TR	80		-				0	+	+		-	+	+	+							+	+	+
C6H5Cl			TR	100				-	-	0	+	+		-	+	+	+							+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1209	**sodium hypochlorite**	wä	5%	20	+	+	+	+	+	+	+	+			-	-	+	-	+	-	+	+	+	+	-	+
		wä	5%	40	+	+	0	0	0	0	+	+					+		0		+		+	+		+
		wä	5%	60	0	+	-	-	-	0	+	+											+	+		
NaOCl		wä	5%	80		+				-	+	+											+			
ClNaO		wä	5%	100							+	+														
		wä	12,5%	20	+	+	0	0	0	+	+	+	-		-	-	+	-	+	-	+	+	+	+	-	+
		wä	12,5%	40	+	+	0	-	-	0	+	+					+		-		+		+	+		+
		wä	12,5%	60	0	+				-	+	+											+	+		
		wä	12,5%	80		+					+	+											+			
		wä	12,5%	100							+	+														
		wä	15%	20	+	+	-	-	-	+	+	+	-		-	-	+	-	0	-	+	+	+	+	-	+
		wä	15%	40	+	+				0	+	+					+		-		+		+	+		+
		wä	15%	60		+				-	+	+											+	+		
		wä	15%	80		+					+	+											+			
		wä	15%	100							+	+														
1210	**bromochloromethane**		TR	20	-	-	-	-	-		+	+		-	+	+	+							+	+	+
			TR	40							+	+			+	+	+							+	+	+
			TR	60							+	+			+	+	+							+	+	+
CH2BrCl																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1211	**chloroacetic acid**	wä	33%	20	+		+	+	+	+	+	+			-	-	+	-	0	-	-	0	+	+	+	+
monochloroacetic acid		wä	33%	40	+		+	+	+	+	+	+					+						+	+	+	+
		wä	33%	60	0		+	+		+	+	+					+							+	+	+
ClCH2CO2H		wä	33%	80						+	+	+														
C2H3ClO2		wä	33%	100							+	+														
		wä	50%	20	+		+	+	+	+	+	+			-	-	+	-	0	-	-	0	+	+	+	+
		wä	50%	40	+		+	+	+	0	+	+					+						+	+	+	+
		wä	50%	60	0		+	+		-	+	+					+							+	+	+
		wä	50%	80							+	+														
		wä	50%	100							+	+														
		wä	85%	20	+		+	+	+	+	+	+			-	-	+	-	0	-	-	0	+	+	+	+
		wä	85%	40	+		+	+	+	0	+	+					+							+	+	+
		wä	85%	60	0		+	+		-	+	+					+							+	+	+
		wä	85%	80							+	+														
		wä	85%	100							+	+														
1212	**chloroethanol**		TR	20	-		+	0	0	+	+	+	-		+	+	+	-	0	-	-	0		+		+
ethylene chlorohydrin			TR	40	-		+			0	+	+												+		+
			TR	60	-		+	0	0	0	+	+												+		+
ClCH2CH2OH			TR	80						-	+	+												+		
C2H5ClO			TR	100							+	+												+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1213	**chlorine**	gf, tr	GK	20	0	-	-	-	-	+	+	+					+	-	-	-	+	0	+			
		gf, fe	GK	20	0	-	-	-	-	0	+	+			-	-	+	-	-	-	-	0	+			
		gf, tr	GK	40	0					+	+	+					+						+			
		gf, fe	GK	40						0	+	+					+						+			
Cl2		gf, tr	GK	60	-					+	+	+					+						+			
		gf, fe	GK	60						-	+	+					+						+			
		gf, tr	GK	80							+	+					+						+			
		gf, fe	GK	80							+	+					+									
		gf, tr	GK	100							+	+														
		gf, fe	GK	100							+	+					+									
1215	**chloride of lime**	wä	GL	20	+		+	+	+	+	+	+	0	+	+	+	+	+	+	-	+	+	+	+	+	+
calcium chloride hypochlorite		wä	GL	40	+		+	+	+	+	+	+	0	+	+	+	+		+		+	+	+	+	+	+
		wä	GL	60			+	+	+	0	+	+			0	0			+		+	0	+	+	+	+
CaCl(OCl) + Ca(OH)2		wä	GL	80						0	+	+									+		+	+	+	
CaCl2O		wä	GL	100							+	+											+	+	+	
1216	**4-chloro-m-cresol**		TR	20	-		-	-	-		+	+														
4-chloro-3-methylphenol			TR	40							+	+														
1-chloro-4-hydroxy-2-methylbenzene			TR	60							+	+														
ClC6H3(CH3)OH			TR	80							+	+														
C7H7ClO			TR	100							+	+														
1217	**chloroform**		TR	20	-	-	-	-	-	+	+	+	-	-	+	+	+	-	-	-	0	-	+	+	+	+
trichloromethane			TR	40	-	-	-	-	-	+	+	+		-	+	+	+						+	+	+	+
			TR	60	-	-	-	-	-	+	+	+		-	+	+	+						+	+	+	+
CHCl3																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1218	**chlorophenol (2-, 3- a. 4-)**		TR	20	+						+	+														
			TR	40							+	+														
			TR	60							+	+														
ClC6H4OH			TR	80							+	+														
C6H5ClO			TR	100							+	+														
1219	**chloric acid**	wä	10%	20	+	+	+	+	+	+	+	+	-	-	0	0		-		-	-	+	+			
		wä	10%	40	+	+	+	0	0	+	+	+										+	+			
		wä	10%	60	0	+		-	-		+	+														
		wä	10%	80		+					+	+														
HClO3		wä	10%	100							+	+														
		wä	20%	20	+	+	0	0	0	+	+	+			-	-		-		-	-	+	+			
		wä	20%	40	+	+		-	-	+	+	+										+	+			
		wä	20%	60	-	+					+	+														
		wä	20%	80		+					+	+														
		wä	20%	100							+	+														
1220	**chlorosulfonic acid**		TR	20	-		-	-	-	0	+	+	-	-				-	-	-	-	-	+	+	-	+
chlorosulfuric acid			TR	40						-	+	+											+	+	-	+
			TR	60							+	+												+		
ClSO3H			TR	80							+	+												+		
HClSO3			TR	100							+	+												+		
1221	**chlorotoluene (2-, 3- a. 4-)**		TR	20	-	-	-	-	-		+	+	-	-	+	+	+	-	-	-	-	-	+	+	+	+
			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
CH3C6H4Cl			TR	80							+	+			+	+	+							+		+
C7H7Cl			TR	100							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1222	**chlorotrifluoroethylene**	gf	TR	20	+		-	-	-		+	+														
trifluorovinyl chloride		gf	TR	40	+		-				+	+														
		gf	TR	60	+		-	-	-		+	+														
ClCF=CF2		gf	TR	80							+	+														
C2ClF3		gf	TR	100				-	-		+	+														
1224	**chlorine, aqueous solution**	wä	GL	20	0	+	0	0	0	+	+	+	-		+	+	+	-	0	0	+	-	+	+		+
		wä	GL	40	0	+	0			+	+	+											+	+		+
		wä	GL	60		+				+	+	+											+	+		+
		wä	GL	80		+				+	+	+												+		
Cl2		wä	GL	100						+	+	+												+		
1225	**hydrogen chloride**	gf	HK	20	+		+	+	+	+	+	+						0	+	0	+	0	+			
		gf	HK	40	+		+	+	+	+	+	+						-	+	-	+	0	+			
		gf	HK	60	0		+	+	+	+	+	+							+		+	-	+			
		gf	HK	80						+	+	+														
HCl		gf	HK	100						+	+	+														
		gf	HK	120							+	+														
1226	**potassium chromium(III) sulfate**	wä	GL	20	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
chromium(III) potassium sulfate		wä	GL	40	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
chromium alum		wä	GL	60	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
CrK(SO4)2		wä	GL	80						+	+	+					+	+	+	+	+		+	+	+	
CrKO8S2		wä	GL	100							+	+					+		+		+		+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1227	**chromium(III) chloride**	wä	GL	20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60	+		+	+	+	+	+	+					+				+		+	+	+	+
CrCl3		wä	GL	80						+	+	+					+						+	+	+	
Cl3Cr		wä	GL	100						+	+	+					+						+	+	+	
1228	**chromium(III) fluoride**	wä	GL	20	+		+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+					+				+		+	+	+	+
		wä	GL	60			+	+		+	+	+					+				+		+	+	+	+
		wä	GL	80						+	+	+					+						+	+	+	
CrF3		wä	GL	100							+	+					+						+	+	+	
1229	**chromium(III) hydroxide**	wä	GL	20	+		+	+	+	+	+	+					+		+				+	+	+	+
		wä	GL	40			+	+	+	+	+	+					+		+				+	+	+	+
		wä	GL	60			+	+	+	+	+	+					+		+				+	+	+	+
Cr(OH)3		wä	GL	80							+	+					+						+	+	+	+
H3CrO3		wä	GL	100							+	+					+						+	+	+	
1230	**chromium(III) nitrate**	wä	GL	20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+					+				+		+	+	+	+
Cr(NO3)3		wä	GL	80						+	+	+					+						+	+	+	
CrN3O9		wä	GL	100							+	+					+						+	+	+	
1231	**chromium(III) oxide**		TR	20	+		+	+	+	+	+	+	-						+		+					
			TR	40	+		+	+	+	+	+	+							+		+					
			TR	60			+	+	+	+	+	+							+		+					
			TR	80						+	+	+							+		+					
Cr2O3			TR	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1232	**chromic acid**	wä	20%	20	+	+	+	+	+	+	+	+			-	-		-	0	-	+	0	+	+		+
		wä	20%	40	+	+	+	0	0	+	+	+							0		+	0	+	+		+
		wä	20%	60	0	+	0	-	-	+	+	+							0		+	0	+	+		
$CrO_3 + H_2O$		wä	20%	80		+				+	+	+											+	+		
H_2CrO_4		wä	20%	100							+	+														
		wä	30%	20	+	+	+	0	0	+	+	+			-	-		-	0	-	+	0	+	+		+
		wä	30%	40	+	+	0	-	-	+	+	+							0		+	0	+	+		+
		wä	30%	60	0	+	-			+	+	+							0		+	0	+	+		
		wä	30%	80		+				+	+	+											+	+		
		wä	30%	100							+	+														
		wä	50%	20	+		+	0	0	+	+	+		-	-	-		-	0	-	+	0	+	+		+
		wä	50%	40	+		0	-	-	+	+	+		-					0		+	0	+	+		+
		wä	50%	60	0		-			+	+	+		-					0		+	0	+	+		
		wä	50%	80						+	+	+											+	+		
		wä	50%	100							+	+														
		wä	60%	20	+		0	0	0	+	+	+			-	-		-	0	-	+	0	+	+		+
		wä	60%	40	+		-	-	-	+	+	+							0		+	0	+	+		+
		wä	60%	60						+	+	+							0		+	0	+	+		
		wä	60%	80							+	+											+	+		
		wä	60%	100							+	+														
1233	**chromosulfuric acid**			20	+		-	-	-	+	+	+	-	-	-	-							+	+		+
				40						+	+	+											+	+		+
				60							+	+											+	+		
$K_2CrO_4/H_2SO_4/H_2O$ = 250g/200g/1000g				80							+	+											+			
				100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1234	**chromosulfuric acid**			20	+					+	+	+	-		-	-							+	+		+
				40						+	+	+											+	+		+
				60							+	+											+	+		
K2CrO4/H2SO4/H2O = 340g/10g/1000g				80							+	+											+			
				100							+	+														
1235	**chromosulfuric acid**			20	+					+	+	+	-		-	-							+	+		+
				40						+	+	+											+	+		+
				60							+	+											+	+		
K2CrO4/H2SO4/H2O = 400g/10g/100g				80							+	+											+			
				100							+	+														
1236	**chromosulfuric acid**			20	+					+	+	+			-	-							+	+		+
				40						+	+	+											+	+		+
				60							+	+											+	+		
K2CrO4/H2SO4/H2O = 400g/10g/1000g				80							+	+											+			
				100							+	+														
1237	**chromosulfuric acid**			20	+		-	-	-	+	+	+	-	-	-	-		-	0	-	+	0	+	+		+
				40	0					+	+	+							0		+	0	+	+		+
				60						+	+	+									+		+	+		
K2CrO4/H2SO4/H2O = 500/150/350g				80						0	+	+											+			
				100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1238	**citric acid**	wä	10%	20	+	+	+	+	+	+	+	+		+	+	+	+	0	+	+	+	+	+	+	+	+
2-hydroxy-1,2,3-propanetricaboxylic acid		wä	10%	40	+	+	+	+	+	+	+	+			+	+	+	-	+	+	+	+	+	+	+	+
		wä	10%	60	+	+	+	+	+	+	+	+			+	+	+		+	+	+	+	+	+	+	
HOC(CO2H)(CH2CO2H)2		wä	10%	80		+		+	+	+	+	+									+		+	+	+	
C6H8O7		wä	10%	100						+	+	+											+	+		
		wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	0	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	-	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+			-	0	+		+	+	+	+	+	+	+	
		wä	GL	80		+		+	+	+	+	+									+		+	+	+	
		wä	GL	100						+	+	+											+	+		
1239	**crotonaldehyde**		TR	20	-	-	+	+	+	+	+	+	-		+	+	+	+	+	+	+	+	+	+		+
trans-2-butenal			TR	40		-	+			+	+	+			+	+	+						+	+		+
			TR	60		-	0			0	+	+			+	+	+						+	+		+
CH3CH=CHCHO			TR	80		-					+	+			+	+	+							+		+
C4H6O			TR	100							+	+			+	+	+							+		+
1241	**crotonic acid**		TR	20	+		-	-	-		+	+														
trans-2-butenoic acid			TR	40							+	+														
			TR	60							+	+														
CH3CH=CHCO2H			TR	80							+	+														
C4H6O2			TR	100							+	+														
1242	**cumene**		TR	20	-	-	-	-	-	+	+	+		-	+	+	+	-	-	-	+	-	+	+		+
2-phenylpropane			TR	40						+	+	+			+	+	+						+	+		+
isopropylbenzene			TR	60						+	+	+			+	+	+						+	+		+
C6H5CH(CH3)2			TR	80							+	+			+	+	+							+		+
C9H12			TR	100							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1243	**cyanamide**		TR	20	-		-	-	-		+	+														
			TR	40							+	+														
			TR	60							+	+														
H2NCN			TR	80							+	+														
CH2N2			TR	100							+	+														
1244	**cyanoacetic acid ethyl ester**		TR	20	-	-	-	-	-		+	+			+	+	+						+	+		+
ethyl cyanoacetate			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
NCCH2CO2C2H5			TR	80							+	+			+	+	+							+		+
C5H7NO2			TR	100							+	+			+	+	+							+		+
1246	**cyclohexane**		TR	20	-	-				+	+	+	0	+	+	+		+	-	-	+	-	+	+		+
hexahydrobenzene			TR	40		-				+	+	+	0		+	+							+	+		+
			TR	60		-				+	+	+			+	+							+	+		+
			TR	80		-				+	+	+			+	+							+	+		+
C6H12																										
1247	**cyclohexanol**		TR	20	+	-	+	+	+	+	+	+			+	+	+	-	-	-		-	+	+		+
			TR	40	+	-	+	+	+	+	+	+			+	+	+					-	+	+		+
			TR	60	0	-	+	0	0	0	+	+			+	+	+						+	+		+
C6H11OH			TR	80		-				0	+	+			+	+	+							+		+
C6H12O			TR	100						-	+	+			+	+	+							+		+
1248	**cyclohexanone**		TR	20	-	-	+	+	+	+	+	+	-	-	+	+	+	-	-	-	-	-	+	+		+
			TR	40		-	0	0	0	0	+	+		-	+	+	+						+	+		+
			TR	60		-	0	0	0	0	+	+		-	+	+	+						+	+		+
			TR	80		-				-	+	+		-	+	+	+						+	+		+
C6H10O			TR	100							+	+		-	+	+	+						+	+		+

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1249	**cyclohexene**		TR	20	-		-	-	-		+	+			+	+	+	-	-	-			+	+		+
1,2,3,4-tetrahydrobenzene			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
			TR	80							+	+			+	+	+							+		+
C6H10																										
1250	**cyclohexylamine**		TR	20	-		-	-	-		+	+			+	+	+		-		-		+	+		+
aminocyclohexane			TR	40							+	+			+	+	+						+	+		+
cyclohexanamine			TR	60							+	+			+	+	+						+	+		+
C6H11NH2			TR	80							+	+			+	+	+							+		
C6H13N			TR	100							+	+			+	+	+							+		
1252	**cymene (o-, m- a. p-)**		TR	20	-		-	-	-		+	+														
Isopropylmethylbenzene (o-, m- a. p-)			TR	40							+	+														
			TR	60							+	+														
CH3C6H4CH(CH3)2			TR	80							+	+														
C10H14			TR	100							+	+														
1253	**L-cysteine**		TR	20				+	+		+	+														
(R)-2-amino-3-mercaptopropionic acid			TR	40							+	+														
cys			TR	60							+	+														
HSCH2CH(NH2)CO2H			TR	80							+	+														
C3H7NO2S			TR	100							+	+														
1254	**L-cystine**		TR	20				+	+		+	+														
			TR	40							+	+														
			TR	60							+	+														
[-SCH2CH(NH2)CO2H]2			TR	80							+	+														
C6H12N2O4S2			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1255	**DDT**		TR	20	+		+	+	+		+	+														
1,1-bis(4-chlorophenyl)-2,2,2-trichloroethane			TR	40			+	+	+		+	+														
dichlorodiphenyltrichloroethane			TR	60			+	+	+		+	+														
(ClC6H4)2CHCCl3			TR	80							+	+														
C14H9Cl5			TR	100							+	+														
1256	**decaline**		TR	20	+		+	-	-		+	+				+	+	-	-	-	+	-	+	+		+
decahydronaphthalene			TR	40	+		0	-	-		+	+				+	+	-	-	-	0	-	+	+		+
			TR	60	+		0	-	-		+	+				+	+	-	-	-	-	-	+	+		+
			TR	80				-	-		+	+				+	+	-	-	-	-	-	+	+		+
C10H18			TR	100				-	-		+	+				+	+	-	-	-	-	-		+		+
			TR	120				-	-		+	+				+	+	-	-	-	-	-		+		+
1257	**dextran**		TR	20	+						+	+														
			TR	40							+	+														
			TR	60							+	+														
(C6H10O5)x			TR	80							+	+														
C6H10O5			TR	100							+	+														
1258	**dextrin**	wä	VL	20	+	+	+	+	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+
starch gum		wä	VL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	60	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
(C6H10O5)n • xH2O		wä	VL	80		+				+	+	+			+	+	+						+	+	+	
C6H10O5		wä	VL	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1259	**D(+)-glucose**	wä	VL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
dextrose		wä	VL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	60	0	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	VL	80		+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	
C6H12O6		wä	VL	100						+	+	+			+	+	+				+	+	+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	
		wä	GL	100						+	+	+			+	+	+				+		+	+	+	
1260	**butyl ether**		TR	20	0	-	+	0	0	0	+	+			+	+	+	0	-	-	-	0	+	+		+
dibutyl ether			TR	40	-		0	-	-		+	+			+	+	+	-	-	-			+	+		+
			TR	60	-		-	-	-		+	+			+	+	+	-	-	-			+	+		+
CH3(CH2)3O(CH2)3CH3			TR	80							+	+			+	+	+							+		+
C8H18O			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1261	**dibutyl phthalate**		TR	20	-	-	+	+	+	+	+	+		-	+	+	+	-	-	-	0	-	+	+		+
phthalic acid dibutyl ester			TR	40	-	-	0	0	0	0	+	+			+	+	+						+	+		+
			TR	60	-	-	0	0	0	0	+	+			+	+	+						+	+		+
C6H4[CO2(CH2)3CH3]2			TR	80		-		-	-	-	+	+			+	+	+							+		+
C16H22O4			TR	100						-	+	+			+	+	+							+		+
			TR	120						-	+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1262	**dichlorobenzene (o-, m- a. p-)**		TR	20	-	-	-	-	-	+	+	+		-	+	+	+	-	-	-	+	-	+	+		+
			TR	40		-				+	+	+			+	+	+						+	+		+
			TR	60		-				+	+	+			+	+	+						+	+		+
ClC6H4Cl			TR	80		-				0	+	+			+	+	+						+	+		+
C6H4Cl2			TR	100							+	+			+	+	+						+	+		+
			TR	120							+	+			+	+	+							+		+
1263	**dichloroacetic acid**	wä	50%	20	+		+	+	+	+	+	+				-		-		+	0	+	+	+		
		wä	50%	40	+		+	+	+	+	+	+								0	0	+	+	+		
		wä	50%	60	-		+	+			+	+								-	-	0	+	+		
Cl2CHCO2H		wä	50%	80							+	+												+		
C2H2Cl2O2		wä	50%	100							+	+														
			TR	20	-		-	-	-	+	+	+				-		-		0	0	+	+	+		
			TR	40						+	+	+								-	-	0	+	+		
			TR	60							+	+										-	+	+		
			TR	80							+	+												+		
			TR	100							+	+														
			TR	120							+	+														
1264	**1,2-dichloroethane**		TR	20	-	-	-	-	-	+	+	+		-	+	+	+	-	-	-	0	-	+	+		+
ethylene chloride			TR	40	-	-	-	-	-	+	+	+			+	+	+						+	+		+
			TR	60	-	-	-	-	-	+	+	+			+	+	+						+	+		+
ClCH2CH2Cl			TR	80						+	+	+			+	+	+							+		+
C2H4Cl2																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1265	**1,1-dichloroethene**		TR	20	-	-	-	-	-	+	+	+	-	-	+	+	+	-	-	-	0	-	+	+		+
1,1-dichloroethylene																										
vinylidene dichloride																										
CH2=CCl2																										
C2H2Cl2																										
1266	**dichloromethane**		TR	20	-	-	-	-	-	-	+	+	-	-	+	+	+	-	-	-	0	-	+	+		+
methylene chloride			TR	40	-	-		-	-		+	+	-	-	+	+	+						+	+		+
CH2Cl2																										
1267	**1,2-dichloropropane**		TR	20	-	-	-	-	-		+	+		-	+	+	+	-	-	-		-	+	+		+
propylene chloride			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
CH3CHClCH2Cl			TR	80							+	+			+	+	+							+		+
C3H6Cl2			TR	100							+	+			+	+	+							+		+
1268	**1,3-dichloropropene**		TR	20	-	-	-	-	-		+	+		-	+	+	+	-	-	-		-	+	+		+
chloroallyl chloride			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
ClCH2CH=CHCl			TR	80							+	+			+	+	+							+		+
C3H4Cl2			TR	100							+	+			+	+	+							+		+
1269	**1,2-dichlorotetrafluoroethane**	gf	TR	20	+		0	-	-	+	+	+														
Frigen 114		gf	TR	40	0						+	+														
		gf	TR	60							+	+														
ClCF2CF2Cl		gf	TR	80							+	+														
C2Cl2F4		gf	TR	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1270	**Diesel fuels**			20	+		+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	0	+	+		+
				40	+		+	0	0	+	+	+		+	+	+	+	+			+	-	+	+		+
				60	0		0	-	-	+	+	+		+	+	+	+						+	+		+
				80						+	+	+			+	+	+						+	+		+
				100						+	+	+			+	+	+						+	+		+
				120						+	+	+			+	+	+							+		+
1271	**diethanolamine**		TR	20			+	+	+	-	+	+			+	+					-		+	+		+
2,2'-iminodiethanol			TR	40							+	+			+	+							+	+		+
bis(2-hydroxyethyl)amine			TR	60							+	+			+	+							+	+		
(HOCH2CH2)2NH			TR	80							+	+			+	+								+		
C4H11NO2			TR	100							+	+			+	+								+		
1272	**diethylamine**		TR	20	0	-	+	+	+	0	+	+			+	+	+	-	0	-	-	-	+	+		+
			TR	40	0	-	0			-	+	+			+	+	+						+	+		+
			TR	60		-	0				+	+			+	+	+						+	+		+
(C2H5)2NH																										
C4H11N																										
1273	**diethylene glycol**		TR	20	+		+	+	+	+	+	+	-		+	+	+	+	+	0	+	+	+	+		+
bis(2-hydroxyethyl)ether			TR	40	+		+	+	+	+	+	+			+	+	+	+	+	0	+	+	+	+		+
diglycol			TR	60	+		+	+	+	+	+	+			+	+	+	+	+	0	+	+	+	+		+
O(CH2CH2OH)2			TR	80						+	+	+			+	+	+	-	+	-	+	+	+	+		+
C4H10O3			TR	100						+	+	+			+	+	+		+		+	0	+	+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1274	**diethyl ether**		TR	20	-	-	0	0	0	+	+	+	-		+	+	+	-	-	-	-	0	+	+	+	+
ethyl ether			TR	40	-	-	-	0	0	+	+	+			+	+	+						+	+	+	+
ether																										
(C2H5)2O																										
C4H10O																										
1275	**diethyl ketone**		TR	20	0	-	+	0	0		+	+	-		+	+	+				-		+	+		+
3-pentanone			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
C2H5COC2H5			TR	80							+	+			+	+	+							+		+
C5H10O			TR	100							+	+			+	+	+							+		+
1276	**diglycolic acid**	wä	30%	20	+		+	+	+	+	+	+	-	+	+	+	+						+	+	+	+
		wä	30%	40	+		+	+	+		+	+	-		+	+	+						+	+	+	+
		wä	30%	60	0		+	+	+		+	+					+						+	+		
O(CH2CO2H)2		wä	30%	80							+	+					+						+	+		
C4H6O5		wä	30%	100							+	+					+						+	+		
1277	**diisobutyl ketone**		TR	20	+		+	+	+	+	+	+	-		+	+	+	-	0	-	-	-	+	+		+
2,6-dimethyl-4-heptanone			TR	40			-	-	-	+	+	+			+	+	+						+	+		+
isovalerone			TR	60			-	-	-	0	+	+			+	+	+						+	+		+
(CH3)2CHCH2COCH2CH(CH3)2			TR	80							+	+			+	+	+							+		+
C9H18O			TR	100							+	+			+	+	+							+		+
1278	**diisopropyl ether**		TR	20	-	-	0	-	-	+	+	+	+	-	+	+	+	-	-	-	-	-	+	+		+
isopropyl ether			TR	40			0			+	+	+	+	-	+	+	+						+	+		+
			TR	60			-	-	-	+	+	+		-	+	+	+						+	+		+
(CH3)2CHOCH(CH3)2																										
C6H14O																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1279	**dimethylamine**		TR	20	-		+	+	+	0	+	+						-	0	-	-	-				
			TR	40			0			-	+	+														
			TR	60			0				+	+														
(CH3)2NH			TR	80							+	+														
C2H7N			TR	100							+	+														
1280	**N,N-dimethylaniline**		TR	20	-	-				+	+	+		-	+	+	+		-	-			+	+		+
			TR	40						+	+	+			+	+	+						+	+		+
			TR	60						0	+	+			+	+	+						+	+		+
C6H5N(CH3)2			TR	80						-	+	+			+	+	+						+	+		+
C8H11N			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1282	**dimethylformamide**		TR	20	-	-	+	+	+	-	+	+	-		+	+	+	-	0	-	-	-	+	+		+
N,N-dimethylformamide			TR	40		-	+	+	+		+	+			+	+	+						+	+		+
DMF			TR	60		-	0	+	+		+	+			+	+	+						+	+		+
HCON(CH3)2			TR	80		-					+	+			+	+	+						+	+		
C3H7NO			TR	100							+	+			+	+	+							+		
			TR	120							+	+			+	+	+							+		
1283	**1,1-dimethylhydrazine**	wä	GL	20	+		+	+	+		+	+			+	+	+						+	+		
		wä	GL	40	+		+	+	+		+	+			+	+	+						+	+		
		wä	GL	60	+						+	+			+	+	+						+	+		
H2NN(CH3)2		wä	GL	80							+	+			+	+	+							+		
C2H8N2		wä	GL	100							+	+			+	+	+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1284	**dimethyl phthalate**		TR	20	-	-	0	+	+		+	+		-	+	+	+	-	0	-	+	-	+	+		+
phthalic acid dimethyl ester			TR	40							+	+			+	+	+						+	+		+
DMP			TR	60							+	+			+	+	+						+	+		+
C6H4-1,2-(CO2CH3)2			TR	80							+	+			+	+	+							+		+
C10H10O4			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1285	**sodium hydrogenphosphate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
disodium hydrogenphosphate		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
Na2HPO4		wä	GL	80		+				+	+	+					+						+	+	+	
HNa2PO4		wä	GL	100						+	+	+					+						+	+	+	
1286	**1,4-dioxane**		TR	20	-	-	+	0	0	0	+	+	-		+	+	+	-	0	-	-	-	+	+		+
			TR	40			+	0	0	-	+	+	-		+	+	+						+	+		+
			TR	60			+	0	0		+	+			+	+	+							+		+
			TR	80				-	-		+	+			+	+	+							+		+
C4H8O2			TR	100							+	+			+	+	+							+		+
1287	**diphenyl**		TR	20	-		+	0	0	-	+	+														
biphenyl			TR	40			+	0	0		+	+														
dibenzene			TR	60			+	0	0		+	+														
C6H5-C6H5			TR	80							+	+														
C12H10			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1288	**diphenylamine**		TR	20	-		-	-	-	-	+	+														
N-phenylaniline			TR	40							+	+														
			TR	60							+	+														
(C6H5)2NH			TR	80							+	+														
C12H11N			TR	100							+	+														
1289	**diphenyl ether**		TR	20	-		-	-	-	-	+	+		-	+	+	+		-	-			+	+		+
diphenyl oxide			TR	40							+	+			+	+	+						+	+		+
phenyl ether			TR	60							+	+			+	+	+						+	+		+
(C6H5)2O			TR	80							+	+			+	+	+							+		+
C12H10O			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1290	**benzophenone**		TR	20							+	+											+			
diphenyl ketone			TR	40							+	+											+			
			TR	60							+	+														
(C6H5)2CO			TR	80							+	+														
C13H10O			TR	100							+	+														
1295	**iron(III) chloride sulfate**	wä	40%	20	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	40%	40	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	40%	60			+	+	+	+	+	+					+				+		+	+	+	+
FeClSO4		wä	40%	80				+	+		+	+					+						+	+		
ClFeO4S		wä	40%	100							+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1296	**iron(II) chloride**	wä	VL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	VL	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	VL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
FeCl2		wä	VL	80	-	+		+	+	+	+	+					+			+	+	+	+	+		
Cl2Fe		wä	VL	100						+	+	+					+				+		+	+		
		wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	0	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+	+	+	+		
		wä	GL	100						+	+	+					+				+		+	+		
			TR	20	+	+		+	+	+	+	+	+					+	+	+	+	+	+			
			TR	40	+	+		+	+	+	+	+	+					+	+	+	+	+	+			
			TR	60	0	+		+	+	+	+	+						+	+	+	+	+	+			
			TR	80		+				+	+	+							+		+		+			
			TR	100						+	+	+									+	+	+			
1297	**iron(II) hydroxide**	wä	GL	20		+	+	+	+					+			+		+		+		+	+	+	+
		wä	GL	40		+	+	+	+					+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+					+			+		+				+	+		+
Fe(OH)2		wä	GL	80		+		+	+								+		+				+	+		
H2FeO2		wä	GL	100													+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1298	**iron(III) chloride**	wä	10%	20	+	+	+	+	+	+	+	+			-	-	+	+	+	+	+	+	+	+	+	+
ferric chloride		wä	10%	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	10%	80		+		+	+	+	+	+					+		+		+		+	+		+
FeCl3		wä	10%	100						+	+	+					+						+	+		+
		wä	48% (GL)	20	+	+	+	+	+	+	+	+			-	-	+	+	+	+	+	+	+	+	+	+
		wä	48% (GL)	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	48% (GL)	60		+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	48% (GL)	80		+		+	+	+	+	+					+	0	+	0	+		+	+		+
		wä	48% (GL)	100						+	+	+					+	0	0	0	+		+	+		+
1299	**iron(III) nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+		+		+		+	+	+	+
Fe(NO3)3		wä	GL	80		+				+	+	+					+						+	+		
FeN3O9		wä	GL	100						+	+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1300	**iron(III) sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
Fe2(SO4)3		wä	10%	80		+		+	+	+	+	+			+	+	+		+		+		+	+		+
Fe2O12S3		wä	10%	100						+	+	+			+	+	+						+	+		+
		wä	50%	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	50%	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	50%	60	0	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	50%	80		+		+	+	+	+	+					+		+		+		+	+		+
		wä	50%	100						+	+	+					+						+	+		+
		wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+		+
		wä	GL	100						+	+	+					+						+	+		+
1301	**iron(II) nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
Fe(NO3)2		wä	GL	80		+		+	+	+	+	+					+	0	+	+	+	0	+	+		
FeN2O6		wä	GL	100						+	+	+					+						+	+		
			TR	20	+	+	+	+	+	+	+	+						+	+	+	+	+				
			TR	40	+	+	+	+	+	+	+	+						+	+	+	+	+				
			TR	60	0	+	+	+	+	+	+	+						+	+	+	+	+				
			TR	80		+				+	+	+						0	+	+	+	0				
			TR	100						+	+	+														

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1302	**iron(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
FeSO4		wä	GL	80		+		+	+	+	+	+					+	0	+	0	+	0	+	+		
FeO4S		wä	GL	100						+	+	+					+						+	+		
1303	**iron oxalate**	wä		20	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
iron(II)/(III) oxalate		wä		40	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
oxalic acid iron salts		wä		60	0		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
FeC2O4/Fe2(C2O4)3		wä		80				+	+	+	+	+							+	+	+	0	+	+		
C2FeO4/C6Fe2O12		wä		100							+	+											+	+		
1307	**epichlorohydrin**		TR	20	-	-	+	+	+	-	+	+							-		-		+	+		+
chloromethyloxirane			TR	40	-	-	+	+	+	-	+	+											+	+		+
1-chloro-2,3-epoxypropane			TR	60			+	+	+	-	+	+											+	+		+
			TR	80						-	+	+												+		+
C3H5ClO			TR	100						-	+	+												+		+
			TR	120						-	+	+														
1308	**natural gas**	gf	HK	20	+		+	+	+	+	+	+						+	-	-	+	-				
		gf	HK	40						+	+	+														
		gf	HK	60						+	+	+														
		gf	HK	80						+	+	+														
CH4		gf	HK	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1309	**petroleum**			20	**0**		+	+	+	+	+	+	+		+	+	+		-	-	+		+	+		+
crude oil				40			**0**	**0**	**0**	+	+	+	+		+	+	+						+	+		+
				60			-	-	-	+	+	+			+	+	+						+	+		+
				80						+	+	+			+	+	+						+	+		+
				100						+	+	+			+	+	+						+	+		+

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Chemical Resistance

Release Date: 2016-07-01

1310	acetic acid	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
ethanoic acid		wä	5%	20	+	+	+	+	+	+	+	+	-		+	+	+	+	+	+	0	0		+	+	+
		wä	5%	40	+	+	+	+	+	+	+	+			+	+	+			+	-	-		+	+	+
		wä	5%	60		+	+	+	+	+	+	+					+							+	+	+
CH3CO2H		wä	5%	80						+	+	+					+							+		+
C2H4O2		wä	5%	100							+	+					+							+		
		wä	10%	20	+	+	+	+	+	+	+	+	-		+	+	+	+	+	+	0	0		+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+			+	+	+			+	-	-		+	+	+
		wä	10%	60		+	+	+	+	+	+	+					+							+	+	+
		wä	10%	80						+	+	+					+							+		+
		wä	10%	100							+	+					+							+		
		wä	25%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	0	+	-	0		+	+	+
		wä	25%	40	+		+	+	+	+	+	+		0	+	+	+		0	+				+	+	+
		wä	25%	60			+	+		+	+	+		-			+							+	+	+
		wä	25%	80						+	+	+					+							+		+
		wä	25%	100							+	+					+							+		
		wä	50%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	0	0	-	0		+	+	+
		wä	50%	40	+		+	+	+	+	+	+		-	+	+	+		-					+	+	+
		wä	50%	60			+	+		+	+	+					+							+	+	+
		wä	50%	80						+	+	+					+						-	+		+
		wä	50%	100							+	+					+							+		
		wä	60%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	0	-	-	-		+	+	+
		wä	60%	40	+		+	+	+	+	+	+		-	+	+	+		-					+	+	+
		wä	60%	60							+	+					+							+	+	+
		wä	60%	80							+	+					+						-	+		+
		wä	60%	100							+	+					+							+		
		wä	80%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	0	-	-	-		+		+
		wä	80%	40	0		+	+	+	+	+	+		-	+	+	+		-					+		+
		wä	80%	60							+	+					+							+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	80%	80							+	+					+						-	+		
		wä	80%	100							+	+					+							+		
		wä	90%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	-	-	-	-		+		+
		wä	90%	40	0		+	+	+	+	+	+		-	+	+	+							+		+
		wä	90%	60							+	+					+							+		
		wä	90%	80							+	+					+						-	+		
		wä	90%	100							+	+					+							+		
		wä	95%	20	+	-	+	+	+	+	+	+	-		+	+	+	-	-	-	-	-		+		+
		wä	95%	40	0		+	+	+	0	+	+		-	+	+	+							+		+
		wä	95%	60							+	+					+							+		
		wä	95%	80							+	+					+							+		
		wä	95%	100							+	+					+							+		
		tr	100%	20	0	-	+	+	+	0	+	+	-	-	+	+	+	-	-	-	-	-	+	+		+
		tr	100%	40	-		0	+	+	0	+	+			+	+	+						+	+		+
		tr	100%	60							+	+					+						+	+		
		tr	100%	80							+	+					+						+	+		
		tr	100%	100							+	+					+							+		
1311	**ethane**	gf	HK	20	+		+	+	+	+	+	+						+	-	-	+	-				
		gf	HK	40			+			+	+	+														
		gf	HK	60			+			+	+	+														
CH3CH3		gf	HK	80						+	+	+														
C2H6		gf	HK	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1312	**ethanol**	wä	10%	20	+	0	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+		+
ethyl alcohol		wä	10%	40	+	0	+	+	+	+	+	+			+	+	+		+	+		+	+	+		+
		wä	10%	60	+	0	+	+	+	+	+	+			+	+	+		+	+		+	+	+		+
CH3CH2OH		wä	10%	80		0				+	+	+			+	+	+		+	+			+	+		+
C2H6O		wä	50%	20	+	0	+	+	+	+	+	+	0	+	+	+	+		+	+		+	+	+		+
		wä	50%	40	+	0	+	+	+	+	+	+			+	+	+		+	+		+	+	+		+
		wä	50%	60	0	0	+	+	+	+	+	+			+	+	+		+	+		+	+	+		+
		wä	50%	80		0				+	+	+			+	+	+		+	+			+	+		+
			TR	20	+	0	+	+	+	+	+	+	-	+	+	+	+		+	+		+	+	+		+
			TR	40	+	0	+	+	+	+	+	+			+	+	+		+	+		+	+	+		+
			TR	60	0	0	+	+	+	+	+	+			+	+	+		+	+		0	+	+		+
			TR	80		0				+	+	+			+	+	+		+	+			+	+		+
1313	**ethanolamine**		TR	20	-	-	+	+	+	-	+	+	-		+	+	+	+	+	+	-	+	+	+		+
2-aminoethanol			TR	40			+	+	+		+	+			+	+	+	+	+	+			+	+		+
colamine			TR	60			+	+	+		+	+					+	0		0			+	+		
NH2CH2CH2OH			TR	80				+	+		+	+					+							+		
C2H7NO			TR	100							+	+					+							+		
1314	**ethene**	gf	HK	20	+		+			+	+	+														
ethylene		gf	HK	40			+			+	+	+														
		gf	HK	60			0			+	+	+														
CH2=CH2		gf	HK	80						+	+	+														
C2H4		gf	HK	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1316	**2-ethyl-1-hexanol**		TR	20	+		+	+	+		+	+			+	+	+		-				+	+		+
isooctanol			TR	40			+				+	+			+	+	+						+	+		+
			TR	60			0				+	+			+	+	+						+	+		+
CH3(CH2)3CH(C2H5)CH2OH			TR	80							+	+			+	+	+						+	+		+
C8H18O			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		
1317	**ethyl acetate**		TR	20	-	-	+	+	+		+	+	-	-	+	+	+	-	-	-	-	-	+	+		+
acetic acid ethyl ester			TR	40			0	0	0	-	+	+			+	+	+						+	+		+
			TR	60			-	-	-		+	+			+	+	+						+	+		+
CH3CO2C2H5			TR	80							+	+			+	+	+							+		+
C4H8O2																										
1318	**ethyl acrylate**		TR	20	-	-					+	+					+	-	0	0	-	0		+		+
acrylic acid ethyl ester			TR	40	-	-					+	+												+		+
2-propenoic acid ethyl ester			TR	60	-	-				-	+	+												+		+
CH2=CHCO2C2H5			TR	80		-				-	+	+												+		+
C5H8O2			TR	100							+	+												+		+
1319	**ethylbenzene**		TR	20	-	-	0	0	0	+	+	+		-	+	+	+	-	-	-	+	-	+	+		+
phenylethane			TR	40		-	-	-	-		+	+			+	+	+						+	+		+
			TR	60		-	-				+	+			+	+	+						+	+		+
C6H5C2H5			TR	80		-					+	+			+	+	+						+	+		+
C8H10			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1320	**ethyl chloride**	gf	TR	20	-	-	0	0	0	+	+	+									0	-				
chloroethane		gf	TR	40		-	-	0	0	+	+	+									0					
		gf	TR	60		-				+	+	+									0					
CH3CH2Cl		gf	TR	80		-				+	+	+														
C2H5Cl		gf	TR	100						+	+	+														
1321	**ethylene bromide**		TR	20	-	-	0	-	-	+	+	+			+	+	+	-	-	-	0	0	+	+		+
1,2-dibromoethane			TR	40		-	-			+	+	+			+	+	+						+	+		+
			TR	60		-				+	+	+			+	+	+						+	+		+
BrCH2CH2Br			TR	80		-				+	+	+			+	+	+						+	+		+
C2H4Br2			TR	100						+	+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1322	**ethylenediamine**		TR	20	0	-	+	+	+		+	+	-		+	+	+	-	+		-		+	+		+
ethane-1,2-diamine			TR	40	-	-	+	+	+		+	+			+	+	+						+	+		+
1,2-diaminoethane			TR	60	-	-	+	+	+		+	+			+	+	+						+	+		
H2NCH2CH2NH2			TR	80		-					+	+			+	+	+							+		
C2H8N2			TR	100							+	+			+	+	+							+		
1323	**ethylenediaminetetraacetic acid**	wä	GL	20		+	+	+	+		+	+	-													
EDTA		wä	GL	40		+	+	+	+		+	+														
Titriplex® II		wä	GL	60		+	+	+	+		+	+														
(HO2CCH2)2NCH2CH2N(CH2CO2H)2		wä	GL	80		+					+	+														
C10H16N2O8		wä	GL	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1324	**ethylene glycol**		TR	20	+	0	+	+	+	+	+	+	-		+	+	+	+	+	0	+	+	+	+	+	+
1,2-ethanediol			TR	40	+		+	+	+	+	+	+			+	+	+	+	+	0	+	+	+	+	+	+
glycol			TR	60	+		+	+	+	+	+	+			+	+	+		+	0	+	+	+	+	+	+
HOCH2CH2OH			TR	80						+	+	+			+	+	+		+	0	+	+	+	+		
C2H6O2			TR	100						+	+	+			+	+	+		+	0	+	0	+	+		
			TR	120							+	+			+	+	+							+		
1325	**ethylene glycol diethyl ether**		TR	20	+		+	+	+	+	+	+	-		+	+	+	+	+	0		+	+	+		+
1,2-diethoxyethane			TR	40	+		+	+	+	+	+	+			+	+	+	+	+	0		+	+	+		+
diethyl glycol			TR	60			+	+	+	+	+	+			+	+	+	+	+	0		+	+	+		+
CH3CH2OCH2CH2OCH2CH3			TR	80						+	+	+			+	+	+	0	+	-		+	+	+		+
C6H14O2			TR	100						+	+	+			+	+	+	0	+			+	+	+		+
1326	**ethylene oxide**	gf	TR	20	0	-	+	+	+	+	+	+						-					+			
oxirane		gf	TR	40		-				+	+	+											+			
dimethylene oxide		gf	TR	60		-					+	+											+			
		gf	TR	80		-					+	+											+			
C2H4O		gf	TR	100							+	+											+			
1328	**ethyl methyl ketone**		TR	20	-	-	+	+	+	-	+	+	-	-	+	+	+	-	0	-	-	0	+	+		+
methyl ethyl ketone (MEK)			TR	40		-	0	0	0		+	+		-	+	+	+		0				+	+		+
butanone			TR	60		-	-	0	0		+	+		-	+	+	+						+	+		+
CH3CH2COCH3			TR	80		-					+	+			+	+	+							+		+
C4H8O																										

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1329	**potassium hexacyanoferrate(II)**	wä	10%	20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
potassium ferrocyanide		wä	10%	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
prussiate, yellow		wä	10%	60	0		+	+	+	+	+	+		+	+	+	+	0	+	0	+	+	+	+	+	+
K4Fe(CN)6		wä	10%	80						+	+	+			+	+	+				+	+	+	+		
C6FeK4N6		wä	10%	100						+	+	+			+	+	+						+	+		
		wä	GL	20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+		+	+	+	+	0	+	0	+	+	+	+	+	+
		wä	GL	80						+	+	+			+	+	+				+	+	+	+		
		wä	GL	100						+	+	+			+	+	+						+	+		
1330	**potassium hexacyanoferrate(III)**	wä	10%	20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
potassium ferricyanide		wä	10%	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
prussiate, red		wä	10%	60	0		+	+	+	+	+	+		+	+	+	+	0	+	0	+	+	+	+	+	+
K3Fe(CN)6		wä	10%	80						+	+	+			+	+	+				+	+	+	+		
C6FeK3N6		wä	10%	100						+	+	+			+	+	+						+	+		
		wä	GL	20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+		+	+	+	+	0	+	0	+	+	+	+	+	+
		wä	GL	80						+	+	+			+	+	+				+	+	+	+		
		wä	GL	100						+	+	+			+	+	+						+	+		
1331	**fatty alcohols**	wä		20	+		+	+	+	+	+	+			+	+	+	+			+	+	+	+		+
		wä		40	+		+	+	+	+	+	+			+	+	+	+			+	+	+	+		+
		wä		60	0		+	0	0	+	+	+			+	+	+	+			+	+	+	+		+
		wä		80						+	+	+			+	+	+						+	+		
		wä		100						+	+	+			+	+	+						+	+		

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
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Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1332	**fatty alcohol sulfates**	wä		20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
alkyl sulfates		wä		40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
		wä		60	0		+	0	0	+	+	+			+	+	+	+	+	+	+	+	+	+		+
ROSO3X		wä		80						+	+	+			+	+	+						+	+		+
		wä		100						+	+	+			+	+	+						+	+		
1333	**triglyceride**			20	+					+	+	+			+	+	+	0	-	0	+	-	+	+		+
				40	+					+	+	+			+	+	+						+	+		+
				60	+					+	+	+			+	+	+						+	+		+
				80						+	+	+			+	+	+						+	+		+
				100						+	+	+			+	+	+						+	+		+
1335	**fatty acids > C6**		TR	20	+		0	+	+	+	+	+			+	+	+	0	-	0	+	-	+	+		+
carboxylic acids > C6			TR	40	+		0	+	+	+	+	+			+	+	+						+	+		+
			TR	60	+		0	0	0	+	+	+			+	+	+						+	+		+
RCO2H			TR	80						+	+	+			+	+	+						+	+		+
			TR	100							+	+			+	+	+						+	+		+
1336	**fluorine**	gf	TR	20	-	-	-	-	-	-	+	+						-	-	-	0	0	0			
		gf	TR	40		-					+	+														
		gf	TR	60		-					+	+														
		gf	TR	80		-					+	+														
F2		gf	TR	100							+	+														
1337	**fluoroboric acid**	wä	50%	20						+	+	+						-		-			+	+		
tetrafluoroboric acid		wä	50%	40						+	+	+											+	+		
hydrogen tetrafluoroborate		wä	50%	60							+	+											+	+		
		wä	50%	80							+	+														
HBF4		wä	50%	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

1338	hexafluorosilicic acid	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
fluorosilicic acid		wä	10%	20	+	+	+	+		+	+	+					+	0	+	0	+	+	+	+	+	+
		wä	10%	40	+		+	+		+	+	+					+		+		+		+	+	+	+
		wä	10%	60			+	+		+	+	+										-	+	+		
H2SiF6		wä	10%	80						+	+	+												+		
H2F6Si		wä	10%	100						+	+	+												+		
		wä	30%	20	+	+	+	+		+	+	+					+	-	+	0	+	+	+	+	+	+
		wä	30%	40	+		+	+		+	+	+					+		+		+		+	+	+	+
		wä	30%	60			+	+		+	+	+										-	+	+		
		wä	30%	80						+	+	+												+		
		wä	30%	100						+	+	+												+		
		wä	35%	20	+		+	+		+	+	+					+	-	+	0	+	+	+	+	+	+
		wä	35%	40	+		+	+		+	+	+					+		+		+		+	+	+	+
		wä	35%	60			+	+		+	+	+										-	+	+		
		wä	40%	20	+		+	+		+	+	+					+	-	+	0	+	+	+	+	+	+
		wä	40%	40	+		+	+		+	+	+					+						+	+	+	+
		wä	40%	60			+	+		+	+	+										-	+	+		

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Release Date: 2016-07-01

1339	hydrofluoric acid	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	10%	20	+	+	+	+	-	+	+	+	-	0	-	-	-	-	-	-	+	0	+	+		-
		wä	10%	40	+		+	+		+	+	+									+	0	+	+		
		wä	10%	60	0		+	0		+	+	+											+	+		
		wä	10%	80		0		0		+	+	+												+		
HF		wä	10%	100						+	+	+												+		
		wä	40%	20	+	-	+	+	-	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+		-
		wä	40%	40	0		+	+		+	+	+									+		+	+		
		wä	40%	60	-					+	+	+											+	+		
		wä	40%	80						+	+	+												+		
		wä	40%	100						+	+	+												+		
		wä	50%	20	0	-	+	+	-	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+		-
		wä	50%	40	-		+	0		+	+	+									+		+	+		
		wä	50%	60						+	+	+												+		
		wä	50%	80						+	+	+												+		
		wä	60%	20	-	-	+	0	-	+	+	+	-	-	-	-	-	-	-	-	0	-	+	+		-
		wä	60%	40			0	0		+	+	+									0		+	+		
		wä	60%	60						+	+	+												+		
		wä	70%	20	-	-	+	-	-	+	+	+	-	-	-	-	-	-	-	-	0	-	0	+		-
		wä	70%	40						+	+	+									0		0	+		
		wä	70%	60						+	+	+												+		

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1340	**formaldehyde**	wä	15%	20	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
methanal		wä	15%	40	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	15%	60	0	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+
H2C=O		wä	15%	80		-				+	+	+			+	+	+						+	+		
CH2O		wä	15%	100							+	+			+	+	+							+		
		wä	30%	20	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	40	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	60	0	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+
		wä	30%	80		-				+	+	+			+	+	+						+	+		
		wä	30%	100							+	+			+	+	+							+		
		wä	40%	20	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	40%	40	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	40%	60	0	-	+	+	+	+	+	+			+	+	+	0	+	0	+	0	+	+	+	+
		wä	40%	80		-				+	+	+			+	+	+						+	+		
		wä	40%	100							+	+			+	+	+							+		
1341	**formamide**		TR	20	-		+	+	+		+	+			+	+	+	+	+	+	0	+	+	+		+
formic acid amide			TR	40			+	+	+		+	+			+	+	+	+	+	+	0	+	+	+		+
			TR	60			+	+	+		+	+			+	+	+	-	+	-	0	+	+	+		+
HCONH2			TR	80							+	+			+	+	+							+		+
CH3NO			TR	100							+	+			+	+	+							+		+
1342	**Freon 11 (CFC-11, F-11)**	gf	TR	20	+	0	-	-	-	+	+	+						+	-	-	0	+	-			
trichlorofluoromethane		gf	TR	40		0				+	+	+														
Frigen 11		gf	TR	60		0				+	+	+														
		gf	TR	80		0				+	+	+														
CCl3F		gf	TR	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1343	**Freon 112 (CFC-112, F-112)**		TR	20	+	0	-	-	-	+	+	+		0				0	0							
1,1,2,2-tetrachloro-1,2-difluoroethane			TR	40		0				+	+	+														
			TR	60		0					+	+														
CCl2FCCl2F			TR	80		0					+	+														
C2Cl4F2			TR	100		0					+	+														
1344	**Freon 113 (CFC-113, F-113)**		TR	20	+	0				+	+	+						+	-	+	+	+	-			
1,2,2-trichloro-1,1,2-trifluoroethane			TR	40		0				+	+	+														
			TR	60		0					+	+														
CClF2CCl2F			TR	80		0					+	+														
C2Cl3F3			TR	100							+	+														
1345	**Freon 12 (CFC-12, F-12)**	gf	TR	20	+	0	0	0	0	+	+	+	+					0	0	+	0	0	+			
dichlorodifluoromethane		gf	TR	40		0					+	+	+										+			
		gf	TR	60		0					+	+														
		gf	TR	80		0					+	+														
CCl2F2		gf	TR	100							+	+														
1346	**Freon 21 (HCFC-21, F-21)**	gf	TR	20	-	0	-	-	-	+	+	+											-			
dichlorofluoromethane		gf	TR	40		0				+	+	+														
		gf	TR	60		0				+	+	+														
		gf	TR	80		0				+	+	+														
CHCl2F		gf	TR	100						+	+	+														
1347	**Freon 22 (CFC-22, F-22)**	gf	TR	20	+	0				+	+	+											-			
chlorodifluoromethane		gf	TR	40		0				+	+	+														
		gf	TR	60		0				+	+	+														
		gf	TR	80		0				+	+	+														
CHClF2		gf	TR	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1348	**fruit juices**			20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
				40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
				60	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
				80				+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	
				100						+	+	+			+	+	+	+	+	+	+	+	+	+	+	
1349	**D-fructose**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	
C6H12O6		wä	GL	100						+	+	+			+	+	+				+		+	+	+	
1350	**furan**		TR	20	-	-				+	+	+		-	+	+	+	-	-	-	-	-	+	+		+
			TR	40						-	+	+			+	+	+						+	+		+
C4H4O																										
1351	**furfural**		TR	20	-	-	+	+	+	-	+	+			+	+	+	-	0	-	-	0	+	+		+
2-furylaldehyde			TR	40			+				+	+			+	+	+						+	+		+
			TR	60			0				+	+			+	+	+						+	+		+
			TR	80							+	+			+	+	+						+	+		+
C5H4O2			TR	100							+	+			+	+	+							+		+
1352	**furfuryl alcohol**		TR	20	-	-	+	+	+	+	+	+	-		+	+	+	-	0	0	-	0	+	+		+
2-furylmethanol			TR	40			+	0	0	+	+	+			+	+	+					0	+	+		+
2-hydroxymethylfuran			TR	60			+	0	0	0	+	+			+	+	+					0	+	+		+
			TR	80							+	+			+	+	+					0		+		+
C5H6O2			TR	100							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1353	**Genapol X-080**		TR	20							+	+			+	+	+				+		+	+		+
fatty alcohol ethoxylate isoC13O(EO)8			TR	40							+	+			+	+	+				+		+	+		+
			TR	60							+	+			+	+	+						+	+		+
(CH3)2CH(CH2)10O(CH2CH2O)8H			TR	80							+	+			+	+	+						+	+		+
C29H60O9			TR	100							+	+			+	+	+									+
1356	**gelatine**			20	+		+	+	+	+	+	+				+		+	+	+	+	+				
				40	+		+	+	+	+	+	+				+		+	+	+	+	+				
				60			+	+	+	+	+	+														
				80						+	+	+														
				100							+	+														
1358	**glutamic acid**	wä	VL	20	+		+	+	+	+	+	+					+						+	+	+	+
2-aminoglutaric acid		wä	VL	40			+	+	+		+	+					+						+	+	+	+
		wä	VL	60			+	+	+		+	+					+						+	+	+	+
HO2CCH2CH2CH(NH2)CO2H		wä	VL	80							+	+					+						+	+		
C5H9NO4		wä	VL	100							+	+					+							+		
1359	**glycolic acid**	wä	37%	20	+		+	+	+	+	+	+	+			0	+	+	+	+	+	+	+	+		+
hydroxyacetic acid		wä	37%	40	+		+	+	+	+	+	+	+				+	+	+	+	+	+	+	+		+
		wä	37%	60	0		+	0	0	+	+	+						+	+	+	+	+	+	+		+
HOCH2CO2H		wä	37%	80						+	+	+											+	+		
C2H4O3		wä	37%	100						0	+	+											+	+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1360	**glycerol**		TR	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
propanetriol			TR	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
			TR	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
HOCH2CH(OH)CH2OH			TR	80		+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
C3H8O3			TR	100						+	+	+			+	+	+	+	+	0	+	+	+	+		
			TR	120							+	+			+	+	+							+		
1361	**3-chloro-1,2-propanediol**		TR	20	+		+	+	+	+	+	+			+	+	+	-	+	0	0	+		+		+
			TR	40	0		+			+	+	+			+	+	+		+			0		+		+
			TR	60			+			+	+	+			+	+	+		+					+		+
ClCH2CH(OH)CH2OH			TR	80						+	+	+			+	+	+							+		+
C3H7ClO2			TR	100							+	+			+	+	+							+		+
1362	**uric acid**	wä	GL	20	+		+	+	+	+	+	+	0		+	+	+	+	+	+	+	+	+	+	+	+
2,6,8-trihydroxypurine		wä	GL	40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60			+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80						+	+	+					+		+			+	+	+		
C5H4N4O3		wä	GL	100							+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1363	**urea**	wä	10%	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
carbonic acid diamide		wä	10%	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
carbamide		wä	10%	60	-		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
H2NCONH2		wä	10%	80				+	+	+	+	+			+	+	+						+	+	+	
CH4N2O		wä	10%	100							+	+			+	+	+						+	+		
		wä	30%	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	60	-	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	80		+		+	+	+	+	+			+	+	+		+			+	+	+	+	
		wä	30%	100						0	+	+			+	+	+						+	+		
		wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	-		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80				+	+	+	+	+			+	+	+						+	+	+	
		wä	GL	100							+	+			+	+	+						+	+		
1364	**n-heptane**		TR	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+
			TR	40			0	0	0	+	+	+	+	+	+	+	+	+	-	-	+	0	+	+	+	+
			TR	60			0	0	0	+	+	+		0	+	+	+	+			+	-	+	+	+	+
CH3(CH2)5CH3			TR	80						+	+	+		0	+	+	+						+	+		+
C7H16			TR	100						+	+	+			+	+	+						+	+		+
1365	**n-hexane**		TR	20	+		+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+
			TR	40			+	0	0	+	+	+	+	+	+	+	+	+			+	0	+	+	+	+
			TR	60			0	-	-	+	+	+		0	+	+	+	+			+	-	+	+	+	+
CH3(CH2)4CH3																										
C6H14																										

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1366	**1,2,6-hexanetriol**		TR	20	+		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
1,2,6-trihydroxyhexane			TR	40	+		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
			TR	60	0		+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	+
HO(CH2)4CH(OH)CH2OH			TR	80							+	+			+	+	+	-	0	0	+	+	+	+		+
C6H14O3			TR	100							+	+			+	+	+		0	0	+	+	+	+		+
1370	**honey**			20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
				40	+		+	+	+	+	+	+			+	+	+				+		+	+	+	+
				60			0	+	+		+	+			+	+	+						+	+	+	+
				80							+	+			+	+	+						+	+		
				100							+	+			+	+	+						+	+		
1371	**hydrazine**		TR	20	+	-	+	+	+	-	+	+														
diamine			TR	40		-	+	+	+	-	+	+														
			TR	60		-	+	+		-	+	+														
H2NNH2			TR	80		-					+	+														
H4N2			TR	100							+	+														
1372	**hydrazine hydrate**	wä	64%	20	+		+	+	+	-	+	+	-					-	+	-	-	+	+			
hydrazinium hydroxide		wä	64%	40			+	+	+	-	+	+	-						+			+	+			
		wä	64%	60			+	+		-	+	+														
H2NNH2 • H2O		wä	64%	80							+	+														
H6N2O		wä	64%	100							+	+														
1373	**hydroquinone**	wä	GL	20	+		+	+	+	+	+	+		-	+	+	+						+	+	+	+
1,4-dihydroxybenzene		wä	GL	40	+		0	+	+	+	+	+			+	+	+						+	+	+	+
quinol		wä	GL	60			-			+	+	+			+	+	+						+	+		+
C6H4-1,4-(OH)2		wä	GL	80						+	+	+			+	+	+						+	+		
C6H6O2		wä	GL	100						+	+	+			+	+	+							+		

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1374	**hydroxylamine sulfate**	wä	VL	20	+		+	+	+		+	+	+			+	+	+	+	0	+	+	+	+	+	+
hydroxylammonium sulfate		wä	VL	40	+		+	+	+		+	+				+	+	0	+		+	+	+	+	+	+
		wä	VL	60			+	+	+		+	+					+						+	+	+	+
(H3NOH)2SO4		wä	VL	80							+	+											+	+		
H8N2O6S		wä	VL	100							+	+											+	+		
1377	**isooctane**		TR	20	+		+	+	+	+	+	+	-		+	+	+	+	-	-	+	0	+	+	+	+
2,2,4-trimethylpentane			TR	40			0	0	0	+	+	+			+	+	+				+		+	+	+	+
isobutyltrimethylmethane			TR	60			0	-	-	+	+	+			+	+	+						+	+	+	+
(CH3)2CHCH2C(CH3)3			TR	80				-	-	+	+	+			+	+	+						+	+		+
C8H18			TR	100						+	+	+			+	+	+						+	+		+
1378	**2-propanol**		TR	20	+		+	+	+	+	+	+	-		+	+	+	0	+	+	+	0	+	+	+	+
Isopropyl alcohol			TR	40	+		+	+	+	+	+	+			+	+	+	0	+	+	+	0	+	+	+	+
isopropanol			TR	60	0		+	+	+	+	+	+		0	+	+	+	-	+	0	+	0	+	+		+
(CH3)2CHOH			TR	80						0	+	+			+	+	+		0		0		+	+		+
C3H8O			TR	100							+	+			+	+	+				-		+	+		+
1379	**liquid manure**			20			+	+	+		+	+														
				40			+	+	+		+	+														
				60			+	+	+		+	+														
				80							+	+														
				100							+	+														
1380	**iodine**	gf	HK	20	-					+	+	+														
		gf	HK	40	-					+	+	+														
		gf	HK	60	-					+	+	+														
		gf	HK	80							+	+														
I2		gf	HK	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1381	**iodine potassium iodide solution**	wä	3% I2	20	0		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	-	+
potassium polyiodide solution		wä	3% I2	40	-		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
		wä	3% I2	60	-		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
KxIy		wä	3% I2	80						+	+	+											+	+		
IyKx		wä	3% I2	100						+	+	+											+	+		
1382	**iodoform**		TR	20	-		0	0	0	+	+	+														
triiodomethane			TR	40			-	-	-	+	+	+														
			TR	60						+	+	+														
			TR	80						+	+	+														
CHI3			TR	100							+	+														
1383	**hydriodic acid**	wä	VL	20	+					+	+	+											+	+	-	+
		wä	VL	40	0					+	+	+											+	+		+
		wä	VL	60						+	+	+											+	+		+
		wä	VL	80						+	+	+														
HI		wä	VL	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

1384	potash lye	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
potassium hydroxide		wä	10%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		+	+	+	+		+
		wä	10%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	10%	60	+	+	+	+			+	+					+		+			+	+	+		
KOH		wä	10%	80		+		+			+	+					+									
HKO		wä	10%	100							+	+														
		wä	15%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	15%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	15%	60	0	+	+	+			+	+					+		+			+	+	+		
		wä	15%	80		+					+	+					+									
		wä	15%	100							+	+														
		wä	25%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	25%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	25%	60	0	+	+	+			+	+					+		+			+	+	+		
		wä	25%	80		+			-		+	+					+									-
		wä	25%	100							+	+														
		wä	40%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	40%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	40%	60	0	+	+	+			+	+					+		+			+	+	+		
		wä	40%	80		+			-		+	+					+									-
		wä	40%	100							+	+														
		wä	50%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		-	+	+	+		+
		wä	50%	40	+	+	+	+	+		+	+		+			+		+		-	0	+	+		+
		wä	50%	60	0	+	+	+			+	+					+		+			0	+	+		
		wä	50%	80		+			-		+	+					+		0			-				-
		wä	50%	100							+	+														

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Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1385	**potassium nitrate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
		wä	10%	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	0	+	+		+		+
		wä	10%	80		+		+	+	+	+	+				+	+							+		
KNO3		wä	10%	100						+	+	+					+							+		
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+		+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+		+		+
		wä	GL	80		+		+	+	+	+	+				+	+							+		
		wä	GL	100						+	+	+					+							+		
			TR	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	0	+	+				
			TR	40	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+				
			TR	60		+	+	+	+	+	+	+			+	+	+	+	+		+	+				
			TR	80		+		+	+	+	+	+				+	+									
			TR	100						+	+	+					+									
1386	**potassium acetate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
acetic acid potassium salt		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+				+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+				+	+	+	+
CH3CO2K		wä	GL	80		+		+	+	+	+	+					+		+				+	+		
C2H3KO2		wä	GL	100						0	+	+					+						+	+		
1387	**potassium hydrogencarbonate**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
potassium bicarbonate		wä	GL	40	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
KHCO3		wä	GL	80		+		+	+		+	+			+	+	+	-		+	+	-	+	+		
CHKO3		wä	GL	100							+	+			+	+	+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1388	**potassium dichromate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	-	+	+	+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+		+	+	+	+		+		+	+	+	+		+
K2Cr2O7		wä	GL	80		+		+	+	+	+	+			+	+	+						+	+		
Cr2K2O7		wä	GL	100						+	+	+			+	+	+						+	+		
1389	**potassium hydrogensulfate**	wä	30%	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
potassium bisulfate		wä	30%	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
		wä	30%	60		+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
KHSO4		wä	30%	80		+		+	+	+	+	+			+	+	+	-		+	+	-	+	+		
HKO4S		wä	30%	100							+	+					+						+	+		
1390	**potassium hydrogensulfite**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
potassium bisulfite		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
		wä	GL	60		+	+	+	+		+	+			+	+	+	+	+	+	+	+	+	+		+
KHSO3		wä	GL	80		+		+	+		+	+			+	+	+	-		+	+		+	+		
HKO3S		wä	GL	100							+	+					+						+	+		
1391	**potassium hydrogen-L-tartrate**	wä	GL	20	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
tartar		wä	GL	40	+		+	+	+	+	+	+					+						+	+	+	+
L(+)-tartaric acid monopotassium salt		wä	GL	60			+	+	+	+	+	+					+						+	+	+	+
KO2CCH(OH)CH(OH)CO2H		wä	GL	80						+	+	+											+	+		
C4H5KO6		wä	GL	100						+	+	+											+	+		

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Stübbe
Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1392	**potassium borate**	wä	VL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	VL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	VL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
K3BO3		wä	VL	80		+				+	+	+					+						+	+		
BK3O3		wä	VL	100						+	+	+					+						+	+		
		wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+				+	+	+					+						+	+		
		wä	GL	100						+	+	+					+						+	+		
1393	**potassium bromate**	wä	GL	20	+	+	+	+	+	+	+	+				0		+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+				0		+	+	+	+	+	+	+		+
		wä	GL	60	0	+	0	0	0	+	+	+				0		+	+	+	+	+	+	+		+
KBrO3		wä	GL	80		+				+	+	+						-	+	0	+	+	+	+		
BrKO3		wä	GL	100						+	+	+						-	+	0	+	+	+	+		
			TR	20	+	+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	40	+	+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	60	0	+	0	0	0	+	+	+						+	+	0	+	+	+			
			TR	80		+				+	+	+						-	+	0	+	+	+			
			TR	100						+	+	+							+		+	+	+			
1394	**potassium bromide**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
KBr		wä	GL	80		+				+	+	+					+	0	+	+	+	+	+	+		
BrK		wä	GL	100						+	+	+					+		+	0	+	+	+	+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1395	**potassium carbonate**	wä	10%	20	+	+	+	+	+	0	+	+		+			+	+	+	+	+	+	+	+		+
potash		wä	10%	40	+	+	+	+	+	-	+	+		+			+		+		0	+	+	+		+
		wä	10%	60	0	+	+	+			+	+		+			+		+		-	+	+	+		+
K2CO3		wä	10%	80		+					+	+					+		+				+	+		
CK2O3		wä	10%	100							+	+					+							+		
		wä	50%	20	+	+	+	+	+	-	+	+		+			+	+	+	+	0	+	+	+		+
		wä	50%	40	+	+	+	+	+	-	+	+		+			+		+		-	+	+	+		+
		wä	50%	60	0	+	+	+			+	+					+		+				+	+		+
		wä	50%	80		+					+	+					+		+				+	+		
		wä	50%	100							+	+					+							+		
		wä	GL	20	+	+	+	+	+	-	+	+		+			+	+	+	+	0	+	+	+		+
		wä	GL	40	+	+	+	+	+	-	+	+		+			+		+		-	+	+	+		+
		wä	GL	60	0	+	+	+			+	+					+		+				+	+		+
		wä	GL	80		+					+	+					+		+				+	+		
		wä	GL	100							+	+					+							+		
1396	**potassium chlorate**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+	+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+		+		+	+	+	+		+
KClO3		wä	GL	80		+					+	+					+		+		+		+	+		
ClKO3		wä	GL	100							+	+									+		+	+		
			TR	20	+	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+	+	+		+
			TR	40	+	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+	+	+		+
			TR	60	0	+	+	+	+		+	+			+	+	+		+		+	+	+	+		+
			TR	80		+					+	+					+		+		+	0	+	+		
			TR	100							+	+									+		+	+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1397	**potassium chloride**	wä	GL	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
KCl		wä	GL	80		+		+	+	+	+	+					+		+		+	+	+	+		
ClK		wä	GL	100						+	+	+					+		+		+		+	+		
1398	**potassium chlorite**	wä	GL	20	+	+	+	+	+	+	+	+					+						+	+		+
		wä	GL	40		+	+	+	+	+	+	+					+						+	+		+
		wä	GL	60		+	+	+	+	+	+	+					+						+	+		+
KClO2		wä	GL	80		+				+	+	+														
ClKO2		wä	GL	100						+	+	+														
1399	**potassium chromate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+		+	+	0	+	0	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	0	+	0	+	+	+	+		+
		wä	GL	60	+	+	+	+	+	+	+	+					+	-	+	0	+	0	+	+		+
K2CrO4		wä	GL	80		+				+	+	+											+	+		
CrK2O4		wä	GL	100						+	+	+											+	+		
			TR	20	+	+	+	+	+	+	+	+				+		0	+	0	+	+	+			
			TR	40	+	+	+	+	+	+	+	+						0	+	0	+	+	+			
			TR	60	+	+	+	+	+	+	+	+						-	+	0	+	0	+			
			TR	80		+				+	+	+											+			
			TR	100						+	+	+														
1400	**potassium cyanate**	wä	GL	20		+					+	+														
		wä	GL	40		+					+	+														
		wä	GL	60		+					+	+														
KOCN		wä	GL	80		+					+	+														
CKNO		wä	GL	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1401	**potassium cyanide**	wä	GL	20	+	+	+	+	+	-	+	+		+			+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	-	+	+		+			+		+	0	0	+	+	+		+
		wä	GL	60	+	+	+	+		-	+	+					+		+		-	+	+	+		+
KCN		wä	GL	80		+					+	+					+		+			+	+	+		
CKN		wä	GL	100							+	+					+		0			+		+		
1402	**potassium fluoride**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+		+	+	+					+	+	+	+	+	+	+	+	+	+
KF		wä	GL	80		+				+	+	+					+	0	+	0	+	+	+	+		
FK		wä	GL	100						0	+	+											+	+		
			TR	20	+	+	+	+	+	+	+	+		+				+	+	+	+	+	+			
			TR	40	+	+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	60		+	+	+		+	+	+						+	+	+	+	+	+			
			TR	80		+				+	+	+						0	+	0	+	+	+			
			TR	100						0	+	+											+			
1403	**potassium hypochlorite**	wä	13%	20	+	+	0	0	0	+	+	+			-	-	+	-	+		+		+	+	-	+
		wä	13%	40	+	+	0	-	-	0	+	+					+		0		+		+	+		+
		wä	13%	60	0	+				-	+	+											+	+		
KOCl		wä	13%	80		+					+	+											+			
ClKO		wä	13%	100							+	+											+			
1404	**potassium iodate**	wä	GL	20	+		+	+	+	+	+	+					+						+	+		+
		wä	GL	40	+		+			+	+	+					+						+	+		+
		wä	GL	60						+	+	+					+						+	+		+
KIO3		wä	GL	80						+	+	+											+	+		
IKO3		wä	GL	100						+	+	+											+	+		

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Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1405	**potassium iodide**	wä	GL	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	0	+	0	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+			+	+	+	-	+	-	+	+	+	+	+	+
KI		wä	GL	80		+				+	+	+					+				+		+	+		
IK		wä	GL	100						+	+	+					+						+	+		
1406	**potassium metaborate**	wä		20	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä		40	+		+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä		60			+	+	+	+	+	+		+			+		+		+		+	+	+	+
K3B3O6		wä		80						+	+	+					+						+	+		
B3K3O6		wä		100						+	+	+					+						+	+		
1407	**potassium nitrite**	wä	GL	20	+		+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+					+	0	+	-	+	+	+	+	+	+
		wä	GL	80							+	+					+		0		+	+	+	+		
KNO2		wä	GL	100							+	+									+	+	+	+		
			TR	20	+		+	+	+	+	+	+						+	+	+	+	+	+			
			TR	40	+		+	+	+	+	+	+						+	+	+	+	+	+			
			TR	60	0		+	+	+	+	+	+						0	+	-	+	+	+			
			TR	80						+	+	+							0		+	-	+			
			TR	100						+	+	+									+		+			

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1408	**potassium perchlorate**	wä	VL	20	+	+	+	+	+	+	+	+	+			+	+	0	+	+	+	+	+	+		+
		wä	VL	40	+	+	+	+	+	+	+	+	+			+	+	0	+	+	+	+	+	+		+
		wä	VL	60	0	+		+	+	+	+	+				+	+	-	+		+	+	+	+		+
KClO4		wä	VL	80		+					+	+				+	+					+	+	+		
ClKO4		wä	VL	100							+	+											+	+		
		wä	GL	20	+	+	+	+	+	+	+	+	+		+	+	+	0	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+	+		+	+	+	0	+	0	+	+	+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+				+	+		+		+	+	+	+		+
		wä	GL	80		+					+	+					+					0	+	+		
		wä	GL	100							+	+											+	+		
1409	**potassium permanganate**	wä	6%	20	+	+	+	+	+	+	+	+		+			+	0	+		+	+	+	+		+
potassium manganate(VII)		wä	6%	40	+	+	+	+	+	+	+	+		+			+	-	+		+	+	+	+		+
		wä	6%	60	0		0	0	0	+	+	+					+		+		+	+	+	+		+
		wä	6%	80						+	+	+											+	+		
KMnO4		wä	6%	100							+	+											+	+		
1410	**potassium persulfate**	wä	GL	20	+	+	+	+	+	+	+	+					+	-	+	+	+	+	+	+		+
potassium peroxodisulfate		wä	GL	40	+		+	+	+	+	+	+					+	-	+	+	+	+	+	+		+
		wä	GL	60	0		+	+	+	+	+	+					+	-	+	-	+	+	+	+		+
K2S2O8		wä	GL	80						+	+	+					+		+		+	0	+	+		
K2O8S2		wä	GL	100							+	+									+		+	+		
1411	**potassium dihydrogenphosphate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	0	+	0	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	-	+	-	+	+	+	+	+	+
KH2PO4		wä	GL	80		+				+	+	+					+		+		+	0	+	+		
H2KO4P		wä	GL	100						+	+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1412	**potassium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
K2SO4		wä	GL	80		+				+	+	+		+			+		+		+		+	+		
K2O4S		wä	GL	100						+	+	+					+				+		+	+		
1413	**potassium sulfide**	wä	VL	20	+	+	+	+	+	0	+	+				+	+	+	+	-	-	+	+	+	+	+
		wä	VL	40	+	+	+	+	+	0	+	+				+	+	+	+			+	+	+	+	+
		wä	VL	60	0	+	+	+	+	0	+	+				+	+	+	+			+	+	+		+
		wä	VL	80		+					+	+				+	+						+	+		
K2S		wä	VL	100							+	+					+						+	+		
1414	**potassium sulfite**	wä	GL	20	+	+	+			+	+	+					+				+		+	+	+	+
		wä	GL	40	+	+	+			+	+	+					+				+		+	+	+	+
		wä	GL	60	0	+	+			+	+	+					+				+		+	+	+	+
K2SO3		wä	GL	80		+				+	+	+					+						+	+		
K2O3S		wä	GL	100							+	+					+						+	+		
1415	**potassium L-tartrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
L-tartaric acid dipotassium salt		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
KO2CCH(OH)CH(OH)CO2K		wä	GL	80						+	+	+					+						+	+		
C4H4K2O6		wä	GL	100						+	+	+					+						+	+		
1417	**(+/-)-borneol**		TR	20	-		-	-	-	+	+	+				+	+	-	0	0	+	0				
			TR	40						+	+	+														
			TR	60							+	+														
			TR	80							+	+														
C10H18O			TR	100							+	+														

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1420	**sodium hexafluorosilicate**	wä	GL	20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	
sodium fluorosilicate		wä	GL	40	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	
		wä	GL	60	0		+	+	+	0	+	+		+	+	+	+	+	+	+	+	+	+	+	+	
Na2SiF6		wä	GL	80						-	+	+											+	+		
F6Na2Si		wä	GL	100							+	+											+	+		
1421	**silicic acid**	wä	GK	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
orthosilicic acid		wä	GK	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GK	60	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
H4SiO4 = Si(OH)4		wä	GK	80		+				+	+	+			+	+	+		+		+	+	+	+	+	
H4O4Si		wä	GK	100						+	+	+			+	+	+		+		+	+	+	+	+	
1423	**carbon dioxide**	gf	HK	20	+	+	+	+	+	+	+	+						+	+	+	+	+				
		gf	HK	40	+	+	+	+	+	+	+	+						+	+	+	+	+				
		gf	HK	60	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		gf	HK	80		+		+	+	+	+	+							+		+	+				
CO2		gf	HK	100						+	+	+									+					
		gf	HK	120						+	+	+														
1424	**carbon monoxide**	gf	HK	20	+	+	+	+	+	+	+	+						+	+	+	+	+				
		gf	HK	40	+	+	+	+	+	+	+	+						+	+	+	+	+				
		gf	HK	60	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		gf	HK	80		+		+	+	+	+	+							+		+	+				
CO		gf	HK	100						+	+	+									+					
		gf	HK	120						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1425	**mixed acid: HCl 27%, HNO3 18%**	wä		20	+	+	-	-	-	0	+	+	-		-	-	-	-	-	-	0	0	+	+	-	+
aqua regia		wä		40	0						+	+												+		+
		wä		60							+	+														
HCl 27%, HNO3 18%, H2O 55%		wä		80		-					+	+														
		wä		100							+	+														
1426	**creosote**			20	-	-					+	+		-	+	+	+	-	-	-			+	+		+
guajacol/cresol-mixture				40		-					+	+			+	+	+						+	+		+
				60		-					+	+			+	+	+						+	+		+
				80		-					+	+			+	+	+						+	+		+
				100							+	+			+	+	+							+		+
				120							+	+			+	+	+									
1427	**cresol (o-, m-, a. p-)**	wä	GL	20	0	-	+	+	+	+	+	+		-	+	+	+	0	-	-	+	0	+	+		+
methylphenol (o-, m-, a. p-)		wä	GL	40		-	+	+	+	+	+	+			+	+	+	0			+		+	+		+
		wä	GL	60		-		+	+	+	+	+			+	+	+						+	+		+
CH3C6H4OH		wä	GL	80		-				0	+	+			+	+	+						+	+		
C7H8O		wä	GL	100							+	+			+	+	+						+	+		
1428	**cresol sulfonic acid**	wä	GL	20	+		+				+	+					+	-	-	-	+	-	+	+	+	+
		wä	GL	40	+						+	+					+				0		+	+	+	+
		wä	GL	60	+						+	+					+						+	+		+
CH3C6H3(OH)SO3H		wä	GL	80							+	+					+							+		
C7H8O4S		wä	GL	100							+	+					+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1429	**copper(I) chloride**	wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+	0	+	+	+	0	+	+	+	+
CuCl		wä	GL	80		+				+	+	+					+		+		+		+	+	+	
ClCu		wä	GL	100							+	+					+						+	+	+	
1431	**copper(II) acetate arsenate(III)**	wä	GL	20	+	+	+	+	+		+	+						+	+	+	+	+				
Schweinfurter Green		wä	GL	40		+	+	+	+		+	+						+	+	+	+	+				
		wä	GL	60		+					+	+						0	+	+	+	0				
3Cu(AsO2)2 • Cu(CH3CO2)2		wä	GL	80		+					+	+							+		+					
C4H6As6Cu4O16		wä	GL	100							+	+														
1432	**copper(II) carbonate basic**	wä	GL	20	+	+	+	+	+		+	+		+			+	+	+	+	+	+	+	+		+
copper(II) hydroxide carbonate		wä	GL	40	+	+	+	+	+		+	+		+			+	+	+	+	+	+	+	+		+
copper(II) carbonate hydroxide		wä	GL	60		+	+	+	+		+	+					+	0	+	+	+	0	+	+		+
CuCO3 • Cu(OH)2		wä	GL	80		+					+	+					+		+		+		+	+		
CH2Cu2O5		wä	GL	100							+	+					+						+	+		
1433	**copper(II) chloride**	wä	GL	20	+	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+					+	0	+	+	+	0	+	+	+	+
CuCl2		wä	GL	80		+				+	+	+							+		+		+	+	+	
Cl2Cu		wä	GL	100							+	+											+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1434	**copper(I) cyanide**	wä	GL	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+		+
		wä	GL	60		+	+	+	+	+	+	+					+	0	+	+	+	0	+	+		+
CuCN		wä	GL	80		+				+	+	+					+		+		+		+	+		
CCuN		wä	GL	100							+	+					+							+		
			TR	20		+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	40		+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	60		+	+	+	+	+	+	+						0	+	+	+	0	+			
			TR	80		+				+	+	+							+		+		+			
			TR	100							+	+														
1435	**copper(II) nitrate**	wä	30%	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+	+
		wä	30%	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+	+
		wä	30%	60	0	+	+	+	+	+	+	+			+	+	+	0	+	+	+	0	+		+	+
Cu(NO3)2		wä	30%	80	-	+				+	+	+			+	+	+		+		+		+			
CuN2O6		wä	30%	100						+	+	+			+	+	+						+			
		wä	50%	20	+	+	+	+	+	+	+	+						+	+	+	+	+	+		+	+
		wä	50%	40	+	+	+	+	+	+	+	+						+	+	+	+	+	+		+	+
		wä	50%	60	0	+	+	+	+	+	+	+						0	+	+	+	0	+		+	+
		wä	50%	80		+				+	+	+							+		+		+			
		wä	50%	100							+	+											+			
		wä	GL	20	+	+	+	+	+	+	+	+						+	+	+	+	+	+		+	+
		wä	GL	40	+	+	+	+	+	+	+	+						+	+	+	+	+	+		+	+
		wä	GL	60	0	+	+	+	+	+	+	+						0	+	+	+	0	+		+	+
		wä	GL	80		+				+	+	+							+		+		+			
		wä	GL	100							+	+											+			

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1436	**copper(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+			+	+	+	0	+	+	+	0	+	+	+	+
CuSO4		wä	GL	80		+				+	+	+			+	+	+		+		+		+	+	+	
CuO4S		wä	GL	100							+	+			+	+	+							+	+	
1437	**copper(II) fluoride**	wä	VL	20	+	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
		wä	VL	40	+	+	+	+	+	+	+	+		+				+	+	+	+	+	+	+	+	+
		wä	VL	60		+	+	+			+	+						0	+	+	+	0	+	+		+
		wä	VL	80		+					+	+							+		+		+	+		
CuF2		wä	VL	100							+	+											+	+		
1438	**copper tetramine compounds**	wä	VL	20	+						+	+					+	+	+	+	+	+	+	+	+	+
		wä	VL	40							+	+					+	+	+	+	+	+	+	+	+	+
		wä	VL	60							+	+					+	0	+	+	+	0	+	+		+
		wä	VL	80							+	+					+		+		+		+	+		
		wä	VL	100							+	+					+						+	+		
1439	**D(+)-lactose**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+		+		+		+	+	+	+
D(+)-lactobiose		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+		+		+		+	+	+	+
milk sugar		wä	GL	60	+	+	+	+	+	+	+	+		+	+	+	+		+		+		+	+	+	+
		wä	GL	80		+		+	+	+	+	+			+	+	+						+	+	+	
C12H22O11		wä	GL	100						+	+	+			+	+	+						+	+	+	

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1440	**lanolin**		TR	20	+		+	+	+	+	+	+	+		+	+	+	+	0	+	+	0	+	+		+
			TR	40	0		+	+	+	+	+	+	+		+	+	+	+	-	0	+	-	+	+		+
			TR	60	-		0	0	0	+	+	+	+		+	+	+	+	-	-	+	-	+	+		+
			TR	80	-					+	+	+			+	+	+	-	-	-	-	-		+		+
			TR	100	-					+	+	+			+	+	+	-	-	-	-	-		+		+
			TR	120	-					+	+	+			+	+	+	-	-	-	-	-		+		+
1441	**latex**			20			+	+	+		+	+						+		+	+					
				40			+	+	+		+	+														
				60			+	+	+		+	+														
				80							+	+					+									
				100							+	+														
1442	**lauric acid**		TR	20						+	+	+														
dodecanoic acid			TR	40						+	+	+														
			TR	60						+	+	+														
CH3(CH2)10CO2H			TR	80						+	+	+														
C12H24O2			TR	100						+	+	+														
			TR	120						+																
1443	**lauroyl chloride**		TR	20	-					+	+	+											+	+		+
lauric acid chloride			TR	40						+	+	+											+	+		+
dodecanoyl chloride			TR	60						+	+	+												+		+
CH3(CH2)10COCl			TR	80						+	+	+												+		+
C12H23ClO			TR	100						+	+	+												+		+
			TR	120						+																

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1444	**lauryl alcohol**		TR	20	+					+	+	+			+	+	+		-		+		+	+		+
1-dodecanol			TR	40	+					+	+	+			+	+	+		-		+		+	+		+
			TR	60	+					+	+	+			+	+	+						+	+		+
CH3(CH2)11OH			TR	80							+	+			+	+	+						+	+		+
C12H26O			TR	100							+	+			+	+	+						+	+		+
			TR	120							+	+			+	+	+							+		
1446	**cod-liver oil**			20	+		+	+	+		+	+			+	+	+		-				+	+		+
fish liver oil				40			+				+	+			+	+	+						+	+		+
				60			0				+	+			+	+	+						+	+		+
				80							+	+			+	+	+							+		+
				100							+	+			+	+	+							+		+
				120							+	+			+	+	+							+		+
1447	**light petrol**		TR	20	+		+	+	+	+	+	+		+	+	+	+	+	-	-	+	-	+	+		+
petroleum ether			TR	40	+		0	0	0	+	+	+		+	+	+	+	0	-	-	+	-	+	+		+
benzine			TR	60	+		-	-	-	+	+	+			+	+	+	-	-	-	0	-	+	+		+
			TR	80				-	-	+	+	+			+	+	+	-	-	-	-	-	+	+		+
			TR	100						+	+	+			+	+	+	-	-	-	-	-	+	+		+
			TR	120						+	+	+			+	+	+	-	-	-	-	-	+	+		+
1448	**light oil**			20						+	+	+			+	+	+						+	+		+
				40						+	+	+			+	+	+						+	+		+
				60						+	+	+			+	+	+						+	+		+
				80							+	+			+	+	+							+		+
				100							+	+			+	+	+							+		+
				120							+	+			+	+	+							+		+

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GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

Stübbe
Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1450	**linseed oil**		TR	20	+	0	+	+	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+		+
			TR	40	0	0	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	0	+	+		+
			TR	60	-	0	+	+	+	+	+	+		+	+	+	+	+		-	+	-	+	+		+
			TR	80		0	-	+	+	+	+	+			+	+	+			-				+		+
			TR	100				+	+	+	+	+			+	+	+							+		+
			TR	120						+					+	+	+							+		+
1451	**lighting gas, benzene-free**			20	+		+	+	+	+	+	+			+	+		+	-	0	+	+				
				40	+						+	+														
				60							+	+														
				80							+	+														
				100							+	+														
1452	**liqueurs**		H	20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+			
			H	40	+		+			+	+	+								+						
			H	60						+	+	+								+						
			H	80						+	+	+								+						
			H	100							+	+														
1453	**linoleic acid**		TR	20						+	+	+			+	+	+		-				+	+		+
cis,cis-9,12-octadecadienoic acid			TR	40						+	+	+			+	+	+						+	+		+
			TR	60						+	+	+			+	+	+						+	+		+
H3C(CH2)4CH=CHCH2CH=CH(CH2)7CO2H			TR	80						+	+	+			+	+	+							+		+
C18H32O2			TR	100						+	+	+			+	+	+							+		+
			TR	120						+	+	+			+	+	+							+		+

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1455	**lithium bromide**	wä	GL	20	+	+	+	+	+	+	+	+	-	+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+		+		+		+	+	+	+
LiBr		wä	GL	80						+	+	+					+				+		+	+		
BrLi		wä	GL	100						+	+	+					+						+	+		
1456	**lithium carbonate**	wä	GL	20	+		+	+	+	-	+	+	-	+			+		+		0		+	+		+
		wä	GL	40	+		+	+	+	-	+	+		+			+		+		-		+	+		+
		wä	GL	60	0		+	+		-	+	+					+						+	+		
Li2CO3		wä	GL	80							+	+					+							+		
CLi2O3		wä	GL	100							+	+					+							+		
1457	**lithium chloride**	wä	GL	20	+	+	+	+	+	+	+	+	-	+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+					+		+		+		+	+	+	+
LiCl		wä	GL	80						+	+	+					+				+		+	+		
ClLi		wä	GL	100						+	+	+					+						+	+		
1459	**lithium hydroxide**	wä	GL	20	+		+	+	+	-	+	+	-				+		+		-		+	+		-
		wä	GL	40	+		+	+	+	-	+	+					+		+		-		+	+		
		wä	GL	60			+	+			+	+					+						+	+		
LiOH		wä	GL	80							+	+					+									
HLiO		wä	GL	100							+	+														
1460	**lithium sulfate**	wä	GL	20	+	+	+	+	+	+	+	+	-	+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+		+		+		+	+	+	+
Li2SO4		wä	GL	80		+				+	+	+					+				+		+	+		
Li2O4S		wä	GL	100						+	+	+					+						+	+		

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1461	**air**	gf		20	+	+	+	+	+	+	+	+	+						+	+	+	+	+			
		gf		40	+	+	+	+	+	+	+	+	+						+	+	+	+	+			
		gf		60		+	+	+	+	+	+	+							+	+	+	+	+			
		gf		80		+				+	+	+							+	+	+	+	+			
		gf		100						+	+	+									+	+	+			
		gf		120						+	+	+											+			
1462	**magnesium carbonate basic**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+		+
4MgCO3 • Mg(OH)2		wä	GL	80		+				+	+	+					+		+		+	+	+	+		
		wä	GL	100							+	+					+				+		+	+		
1463	**magnesium chloride**	wä	10%	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	10%	60		+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
MgCl2		wä	10%	80		+		+	+	+	+	+					+		+		+	+	+	+	+	
Cl2Mg		wä	10%	100						+	+	+					+				+		+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+	+	+	+	+	
		wä	GL	100						+	+	+					+				+		+	+	+	

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Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1464	**magnesium fluoride**	wä	GL	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+		+	+	+					+		+	+	+	+	+	+	+	+
MgF2		wä	GL	80		+				+	+	+					+		+		+		+	+		
F2Mg		wä	GL	100						+	+	+					+						+	+		
1465	**magnesium hydroxide**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+		+	+
		wä	GL	40		+	+	+	+	+	+	+		+			+	+	+	+	+	+	+		+	+
		wä	GL	60		+	+	+		+	+	+		+			+		+	+	+	+	+		+	+
Mg(OH)2		wä	GL	80		+				+	+	+					+		+		+		+			
H2MgO2		wä	GL	100						+	+	+					+						+			
1466	**magnesium nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+		+
Mg(NO3)2		wä	GL	80		+				+	+	+					+		+		+		+	+		
MgN2O6		wä	GL	100						+	+	+					+						+	+		
1467	**magnesium oxide**	wä	GL	20	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
		wä	GL	80		+					+	+					+						+	+		
MgO		wä	GL	100							+	+					+						+	+		

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Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1468	**magnesium sulfate**	wä	10%	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
MgSO4		wä	10%	80		+		+	+	+	+	+					+		+		+		+	+	+	
MgO4S		wä	10%	100						+	+	+					+						+	+	+	
		wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+	+	
		wä	GL	100						+	+	+					+						+	+	+	
1469	**magnesium sulfite**		TR	20	+		+	+	+	+	+	+						+	+	+	+	+	+	+	+	+
			TR	40	+		+	+	+	+	+	+						+	+	+	+	+	+	+	+	+
			TR	60			+	+	+	+	+	+						+	+	+	+	+	+	+		+
MgSO3			TR	80				+	+	+	+	+							+		+		+	+		
MgO3S			TR	100						+	+	+											+	+		
1470	**maleic acid**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	-	0	-	+	-	+	+		+
cis-2-butene-1,4-dioic acid		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+		-		+		+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+				+		+	+		+
HO2CCH=CHCO2H		wä	GL	80		+				+	+	+			+	+	+				-		+	+		
C4H4O4		wä	GL	100						+	+	+					+						+	+		
1471	**manganese(II) chloride**		TR	20	+						+	+						+	+	+	+	+				
			TR	40							+	+						+	+	+	+	+				
			TR	60							+	+						+	+	+	+	-				
MnCl2			TR	80							+	+						+	+	+	+					
Cl2Mn			TR	100							+	+							+	+	+					

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1472	**manganese dioxide**		TR	20	+						+	+						+	+	+	+	+				
manganese(IV) oxide			TR	40							+	+						+	+	+	+	+				
			TR	60							+	+						+	+	+	+					
			TR	80							+	+							+							
MnO2			TR	100							+	+														
1473	**manganese(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+						+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+						+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+						+	+	+	+		+	+	+	+
MnSO4		wä	GL	80		+				+	+	+							+				+	+		
MnO4S		wä	GL	100							+	+											+	+		
1474	**marmelade**			20	+		+	+	+	+	+	+		+		+	+	+	+	+	+	+	+	+		+
				40	0		+	+	+	+	+	+		+		+	+	+	+	+	+	+	+	+		+
				60	0		+	+	+	+	+	+		+		+	+	+	+	+	+	+	+	+		+
				80				+	+	+	+	+					+		+		+		+	+		
				100						+	+	+					+						+	+		
1476	**molasses**			20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
				40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
				60	0		+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
				80						+	+	+			+	+	+	+	+	0	+	+	+	+		+
				100						+	+	+			+	+	+						+	+		
1477	**methane**	gf	HK	20	+		+	+	+	+	+	+	+		+	+	+	+	0	0	+	0	+			
		gf	HK	40							+	+	+		+	+	+						+			
		gf	HK	60							+	+	+		+	+	+						+			
		gf	HK	80							+	+	+		+	+	+						+			
CH4		gf	HK	100							+	+	+		+	+	+						+			

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1478	**malonic acid**	wä	GL	20	0		+	+	+		+	+					+						+	+		+
propanedioic acid		wä	GL	40			+	+	+		+	+					+						+	+		+
methanedicarboxylic acid		wä	GL	60			+	+	+		+	+					+						+	+		+
CH2(CO2H)2		wä	GL	80							+	+					+						+	+		
C3H4O4		wä	GL	100							+	+					+						+	+		
1479	**methanol**		TR	20	+		+	+	+	+	+	+	-	+	+	+	+	-	+	+	-	+	+	+		+
methyl alcohol			TR	40	+		+	+	+	+	+	+		+	+	+	+		+	+		+	+	+		+
			TR	60	0		+	+	+	+	+	+			+	+	+		0	0		+	+	+		+
CH3OH																										
CH4O																										
1480	**methanesulfonic acid**		TR	20	0		+	0	0	+	+	+	-	-			+						+	+	-	+
methylsulfuric acid			TR	40				-	-	+	+	+					+						+	+		+
			TR	60				-	-	+	+	+					+						+	+		+
CH3SO3H			TR	80						0	+	+														
CH4O3S			TR	100							+	+														
1481	**methyl acetate**		TR	20	-	-	+	+	+	+	+	+	-	-	+	+	+	-	-	-	-	-	+	+		+
acetic acid methyl ester			TR	40			0	0	0	0	+	+			+	+	+						+	+		+
			TR	60			-	-	-	-	+	+			+	+	+						+	+		+
CH3CO2CH3																										
C3H6O2																										
1482	**methylamine**	wä	32%	20	0	-	+	+	+	0	+	+					+	-	+	+		+	+	+	+	+
aminomethane		wä	32%	40		-					+	+					+						+	+		+
		wä	32%	60		-					+	+					+						+	+		+
CH3NH2																										
CH5N																										

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1483	**methylbromide**	gf	TR	20	-		0	-	-	+	+	+						-	-	-	+	-	+			
bromomethane		gf	TR	40			-			+	+	+											+			
		gf	TR	60			-			+	+	+											+			
		gf	TR	80						+	+	+											+			
CH3Br		gf	TR	100						+	+	+														
1484	**methyl chloride**	gf	TR	20	-	-	0	-	-	+	+	+						-	-	-	-	-	+			
chloromethane		gf	TR	40		-				+	+	+											+			
		gf	TR	60		-				+	+	+											+			
		gf	TR	80		-				+	+	+											+			
CH3Cl		gf	TR	100						+	+	+														
1485	**methylcyclohexane**		TR	20			0	-	-		+	+			+	+	+		-	-			+	+		+
hexahydrotoluene			TR	40			0				+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
C6H11CH3			TR	80							+	+			+	+	+						+	+		+
C7H14			TR	100							+	+			+	+	+						+	+		+
1487	**methyl formate**		TR	20	-	-					+	+	-	-	+	+	+						+	+		+
formic acid methyl ester			TR	40		-					+	+			+	+	+						+	+		+
HCO2CH3																										
C2H4O2																										
1488	**methyl isobutyl ketone (MIBK)**		TR	20	-	-					+	+	-	-	+	+	+				-		+	+		+
4-methyl-2-pentanone			TR	40		-					+	+			+	+	+						+	+		+
isobutyl methyl ketone			TR	60		-					+	+			+	+	+						+	+		+
(CH3)2CHCH2COCH3			TR	80		-					+	+			+	+	+							+		+
C6H12O																										

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1489	**methyl methacrylate**		TR	20	-	-								-	+	+	+						+	+		+
methacrylic acid methyl ester			TR	40		-									+	+	+						+	+		+
			TR	60		-									+	+	+						+	+		+
CH2=C(CH3)CO2CH3			TR	80		-									+	+	+							+		+
C5H8O2																										
1490	**methyl salicylate**		TR	20	-	-	+	+	+		+	+	-	-	+	+	+						+	+		+
salicylic acid methyl ester			TR	40			+	+	+		+	+			+	+	+						+	+		+
2-hydroxybenzoic acid methyl ester			TR	60							+	+			+	+	+						+	+		+
2-(OH)C6H4CO2CH3			TR	80							+	+			+	+	+							+		+
C8H8O3			TR	100							+	+			+	+	+							+		+
1491	**dimethyl sulfate**		TR	20	-	-					+	+		-	+	+	+	-	-	-	0	+	+	+		+
sulfuric acid dimethyl ester			TR	40							+	+			+	+	+					+	+	+		+
			TR	60							+	+			+	+	+					0	+	+		+
(CH3O)2SO2			TR	80							+	+			+	+	+							+		
C2H6O4S			TR	100							+	+			+	+	+							+		
1492	**milk**			20	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
				40	+		+	+	+	+	+	+	+	+	+	+	+				+		+	+	+	+
				60	+		+	+	+	+	+	+		+	+	+	+						+	+	+	+
				80				+	+	+	+	+			+	+	+						+	+	+	
				100						+	+	+			+	+	+						+	+	+	

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1493	**lactic acid**	wä	10%	20	+	+	+	+	+	+	+	+		+	+	+	+	-	+	-	+	0	+	+	+	+
2-hydroxypropionic acid		wä	10%	40	+	+	+	+	+	+	+	+		+	+	+	+		+		+	0	+	+	+	+
		wä	10%	60		+	+	+	+	0	+	+			+	+	+		0		0	0	+	+		+
CH3CH(OH)CO2H		wä	10%	80		+		+	+	0	+	+							-		0		+	+		
C3H6O3		wä	10%	100						-	+	+											+	+		
		wä	25%	20	+		+	+	+	+	+	+					+	-	+		+		+	+	+	+
		wä	25%	40	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	25%	60			+	+	+		+	+					+						+	+		+
		wä	25%	80							+	+											+	+		
		wä	25%	100							+	+											+	+		
		wä	50%	20	+		+	+	+	+	+	+					+	-	+		+		+	+	+	+
		wä	50%	40	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	50%	60			+	+	+		+	+					+						+	+		+
		wä	50%	80							+	+											+	+		
		wä	50%	100							+	+											+	+		
		wä	90%	20	+	+	+	+	+	+	+	+			-	+	+	-	+	-	+	-	+	+		+
		wä	90%	40	0		+	+	+	+	+	+				+	+		+		+		+	+		+
		wä	90%	60			+	+	+		+	+				+	+						+	+		+
		wä	90%	80		0					+	+											+	+		
		wä	90%	100							+	+											+	+		
1494	**mineral oils**			20	+	+	+	+	+	+	+	+	+		+	+	+	+	-	0	+	0	+	+	+	+
				40	+		+	+	+	+	+	+	+		+	+	+	+		-	+	-	+	+	+	+
				60	+		0	0	0	+	+	+			+	+	+	+			+		+	+	+	+
				80						+	+	+			+	+	+							+		+
				100				-	-	+	+	+			+	+	+							+		+
				120						+	+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1495	**mixed acid: HNO3 20%, H2SO4 10%**	wä		20	+		0	-	-	+	+	+	-		+	+		-	+	0	+	+	+	+		+
		wä		40	+					+	+	+			+	+			+		+	0	+	+		+
		wä		60						+	+	+									+		+	+		+
HNO3 20%, H2SO4 10%, H2O 70%		wä		80						+	+	+														
		wä		100							+	+														
1496	**mixed acid: HNO3 87%, H2SO4 10%**	wä		20	-		-	-	-	0	+	+	-	-				-	-	-	-	-			-	
		wä		40							+	+														
		wä		60							+	+														
HNO3 87%, H2SO4 10%, H2O 3%		wä		80							+	+														
		wä		100							+	+														
1497	**mixed acid: H2SO4 50%, HNO3 33%**	wä		20	+		-	-	-	+	+	+	-	-				-	0	-	+	0		+	-	+
		wä		40	0						+	+												+		+
		wä		60							+	+												+		+
H2SO4 50%, HNO3 33%, H2O 17%		wä		80							+	+														
		wä		100							+	+														
1498	**mixed acid: H2SO4 50%, HNO3 50%**			20	-		-	-	-	+	+	+	-	-				-	-	-	-	-			-	
				40							+	+														
				60							+	+														
H2SO4 50%, HNO3 50%, H2O 0%				80							+	+														
				100							+	+														

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	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1499 mixed acid: H2SO4 18%, HNO3 15%, HF 5%	wä		20	+	+	0	-	-	+	+	+	-	-	-	-	-	-	-	-	+	-	+	+		-
	wä		40						+	+	+									+		+	+		
	wä		60						+	+	+											+	+		
	wä		80							+	+												+		
H2SO4 18%, HNO3 15%, HF 5%, H2O 62%	wä		100							+	+												+		
1500 mixed acid: HNO3 50%, HF 10%	wä		20			-	-	-	+	+	+	-	-	-	-		-	-	-			+	+	-	-
	wä		40						+	+	+											+	+		
HNO3 50%, HF 10%, H2O 40%																									
1501 monochloroacetic acid ethyl ester		TR	20	-	-	+	+	+		+	+	-	-	+	+	+	-	0	-	0	-	+			+
chloroacetic acid ethyl ester		TR	40			+	+	+		+	+			+	+	+						+			+
ethyl chloroacetate		TR	60			+	+	+		+	+			+	+	+						+			+
ClCH2CO2C2H5		TR	80							+	+			+	+	+									+
C4H7ClO2		TR	100							+	+			+	+	+									+
1502 monochloroacetic acid methyl ester		TR	20	-	-	+	+	+		+	+	-	-	+	+	+	-	+	-	0	-	+	+		+
chloroacetic acid methyl ester		TR	40			+	+	+		+	+			+	+	+						+	+		+
methyl chloroacetate		TR	60			+	+	+		+	+			+	+	+						+	+		+
ClCH2CO2CH3		TR	80							+	+			+	+	+							+		+
C3H5ClO2		TR	100							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1503	**mixed acid: HNO3 59%, HF 4,5%**	wä		20			-	-	-	+	+	+	-	-	-	-		-	-	-			+	+	-	-
		wä		40						+	+	+											+	+		
HNO3 59%, HF 4,5%, H2O 36,5%																										
1504	**morphine**		TR	20	+		+				+	+														
			TR	40							+	+														
			TR	60							+	+														
			TR	80							+	+														
C17H19NO3			TR	100							+	+														
1505	**morpholine**		TR	20	-	-	+	+	+	+	+	+	-	-	+	+	+	-	0	0		0	+	+		+
tetrahydro-1,4-oxazine			TR	40			+	+	+	0	+	+		-	+	+	+						+	+		+
			TR	60			+	+	+		+	+		-	+	+	+						+	+		+
			TR	80							+	+			+	+	+							+		+
C4H9NO			TR	100							+	+			+	+	+							+		+
1506	**mixed acid: H2SO4 25%, HNO3 25%, HF 10%**	wä		20	+	+	-	-	-	+	+	+	-	-	-	-	-	-			+		+	+		-
		wä		40						+	+	+									+		+	+		
		wä		60						+	+	+											+	+		
		wä		80							+	+												+		
H2SO4 25%, HNO3 25%, HF 10%, H2O 40%		wä		100							+	+												+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1507	**naphthalene**		TR	20	-	-	+	+	+	+	+	+		-	+	+		+	-	-	+	0				
			TR	40		-	0	0	0	+	+	+			+	+		+			+	-				
			TR	60		-	0	-	-	0	+	+			+	+		+			+					
			TR	80		-					+	+			+	+										
C10H8			TR	100							+	+			+	+										
1508	**naphthalene sulfonic acid (mixture of isomers)**		TR	20	+		+				+	+						0			+					
			TR	40							+	+						0			+					
			TR	60							+	+						-			-					
			TR	80							+	+														
C10H7SO3H			TR	100							+	+														
C10H8O3S																										
1509	**sodium acetate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	0	+	+	+	+
acetic acid sodium salt		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+		+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
CH3CO2Na		wä	GL	80		+		+	+	+	+	+					+		0		0		+	+		
C2H3NaO2		wä	GL	100						0	+	+					+						+	+		
1510	**sodium aluminate**	wä	VL	20	+	+	+				+	+														+
		wä	VL	40		+					+	+														+
		wä	VL	60		+					+	+														+
Na3[Al3O2(OH)8]		wä	VL	80		+					+	+														+
H8Al3Na3O10		wä	VL	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1511	**sodium arsenate**	wä	GL	20		+					+	+														+
		wä	GL	40							+	+														+
		wä	GL	60							+	+														+
Na3AsO4		wä	GL	80							+	+														
AsNa3O4		wä	GL	100							+	+														
1512	**sodium arsenite**	wä	GL	20	+		+	+	+		+	+														
		wä	GL	40							+	+														
		wä	GL	60							+	+														
NaH2AsO3		wä	GL	80							+	+														
H2AsNaO3		wä	GL	100							+	+														
1513	**sodium hydrogencarbonate**	wä	GL	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
sodium bicarbonate		wä	GL	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
NaHCO3		wä	GL	80		+		+	+	0	+	+		+			+		+		+		+	+	+	
CHNaO3		wä	GL	100							+	+					+						+	+		
1514	**sodium dichromate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+		+		+		+	+		+
Na2Cr2O7		wä	GL	80		+				+	+	+					+						+	+		
Cr2Na2O7		wä	GL	100						+	+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1515	**sodium hydrogensulfate**	wä	10%	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
sodium bisulfate		wä	10%	40	+	+	+	+	+	+	+	+					+	0	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+					+	-	+	0	+		+	+	+	+
NaHSO4		wä	10%	80		+				+	+	+					+		0		+		+	+		
HNaO4S		wä	10%	100						+	+	+					+				+		+	+		
		wä	50%	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	50%	40	0	+	+	+	+	+	+	+					+	0	+	+	+	+	+	+	+	+
		wä	50%	60		+	+	+	+	+	+	+					+	-	+	0	+		+	+	+	+
		wä	50%	80		+				+	+	+					+		0		+		+	+		
		wä	50%	100						+	+	+					+				+		+	+		
1517	**sodium hydrogensulfide**	wä		20	+	+	+	+	+	+	+	+			+	+	+	0	+	+	0	+				
sodium bisulfide		wä		40	0	+	+	+	+	+	+	+			+	+	+		+	+	-	+				
		wä		60		+	+	+	+	+	+	+			+	+	+		+	0		+				
NaSH		wä		80		+				+	+	+										0				
HNaS		wä		100						+	+	+														
1518	**sodium hydrogensulfite**	wä	10%	20	+	+	+	+	+	+	+	+			+	+	+	-	+	+	0	+	+	+		+
sodium bisulfite		wä	10%	40	0	+	+	+	+	+	+	+			+	+	+	-	+	+	-	+	+	+		+
		wä	10%	60	-	+	+	+	+	+	+	+			+	+	+		+	0	-	+	+	+		+
NaHSO3		wä	10%	80		+		+	+	+	+	+					+		0	-		0		+		
HNaO3S		wä	10%	100						+	+	+												+		
		wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	-	+	-	-	+	+	+		+
		wä	GL	40	0	+	+	+	+	+	+	+			+	+	+		+	+	-	0	+	+		+
		wä	GL	60	-	+	+	+	+	+	+	+			+	+	+		0	0		+	+	+		+
		wä	GL	80		+		+	+	+	+	+					+		0			0		+		
		wä	GL	100				+	+	+	+	+												+		

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

Stübbe
Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1519	**sodium perborate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+		+
sodium peroxoborate		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	0	+	+	0	+	+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+					+		+	0	-	+	+	+		+
NaBO3		wä	GL	80		+		+	+	+	+	+					+		0	-		0		+		
BNaO3		wä	GL	100						+	+	+					+							+		
1520	**sodium bromate**	wä		20	+		+	+	+	+	+	+						+	+	+	+	+				
		wä		40	0		0	0	0	+	+	+						0	+	+	+	+				
		wä		60						+	+	+						-	+	0	+	+				
NaBrO3		wä		80						+	+	+														
BrNaO3		wä		100						+	+	+														
1521	**sodium bromide**	wä	10%	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+		+			+	0	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+			+		+	0	+	0	+	+	+	+
NaBr		wä	10%	80		+				+	+	+					+				+		+	+	+	
BrNa		wä	10%	100						+	+	+					+						+	+	+	
		wä	50%	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	50%	40	+	+	+	+	+	+	+	+		+			+	0	+	+	+	+	+	+	+	+
		wä	50%	60	0	+	+	+	+	+	+	+		+			+		+	-	+	-	+	+	+	+
		wä	50%	80		+				+	+	+					+						+	+	+	
		wä	50%	100						+	+	+					+						+	+	+	
			TR	20	+	+	+	+	+	+	+	+						+	+	+	+	+	+			
			TR	40	+	+	+	+	+	+	+	+						0	+	+	+	+	+			
			TR	60		+	+	+	+	+	+	+							+		+		+			
			TR	80		+				+	+	+											+			
			TR	100						+	+	+											+			

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1522	**sodium carbonate**	wä	10%	20	+	+	+	+	+	0	+	+		+			+	+	+	+	+	+	+	+		+
soda		wä	10%	40	+	+	+	+	+	-	+	+		+			+		+		0	+	+	+		+
		wä	10%	60	0	+	+	+			+	+		+			+		+		-	+	+	+		+
Na2CO3		wä	10%	80		+		+			+	+					+		+				+	+		
CNa2O3		wä	10%	100							+	+					+							+		
		wä	GL	20	+	+	+	+	+	0	+	+		+			+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	-	+	+		+			+		+		0	+	+	+		+
		wä	GL	60	0	+	+	+			+	+					+		+		-	+	+	+		+
		wä	GL	80		+		+			+	+					+		+				+	+		
		wä	GL	100							+	+					+							+		
			TR	20	+	+	+	+	+	0	+	+		+				+	+	+	+	+	+			
			TR	40	+	+	+	+	+	-	+	+		+					+		0	+	+			
			TR	60	0	+	+	+			+	+							+		-	+	+			
			TR	80		+		+			+	+							+				+			
			TR	100							+	+														
1524	**sodium chlorate**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	0	+	+	+	+	+	+		+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+	+	+		+
NaClO3		wä	GL	80						0	+	+			+	+	+		0	-	+	0	+	+		
ClNaO3		wä	GL	100							+	+							-				+	+		
			TR	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
			TR	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
			TR	60	0	+	+	+	+	+	+	+			+	+	+	-	+	0	+	+				
			TR	80						0	+	+			+	+	+			-	+					
			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1525	**sodium chloride**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
table salt		wä	10%	40	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
brine		wä	10%	60	+	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
NaCl		wä	10%	80		+		+	+	+	+	+					+		+		+		+	+	+	+
ClNa		wä	10%	100						+	+	+					+						+	+	+	+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	100						+	+	+					+						+	+	+	+
1526	**sodium chlorite**	wä	10%	20	0	+	+	+	+	+	+	+					+	-	+	0	+	+	+	+		+
		wä	10%	40		+		+	+	+	+	+					+		+	-	+	+	+	+		+
		wä	10%	60		+		0	0	+	+	+					+		+		+	+	+	+		+
NaClO2		wä	10%	80		+				+	+	+														
ClNaO2		wä	10%	100						0	+	+														
		wä	50%	20	0	+	+	+	+	+	+	+					+	-	+	-	+	+	+	+		+
		wä	50%	40		+					+	+					+						+	+		+
		wä	50%	60		+					+	+					+						+	+		+
		wä	50%	80		+					+	+														
		wä	50%	100							+	+														
1527	**sodium chromate**	wä	VL	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+		+
		wä	VL	40	+	+	+	+	+	+	+	+					+	0	+	+	+	+	+	+		+
		wä	VL	60	0	+	+	+	+	+	+	+					+	-	+	0	+	0	+	+		+
Na2CrO4		wä	VL	80		+				+	+	+					+						+	+		
CrNa2O4		wä	VL	100						+	+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1528	**sodium citrate**	wä	VL	20	+	+	+	+	+	+	+	+	+	+			+		+		+		+	+	+	+
trisodium citrate		wä	VL	40	+	+	+	+	+	+	+	+		+			+		+		+		+	+	+	+
citric acid trisodium salt		wä	VL	60		+	+	+	+	+	+	+		+			+						+	+	+	+
HOC(CO2Na)(CH2CO2Na)2		wä	VL	80		+					+	+					+						+	+		
C6H5Na3O7		wä	VL	100							+	+												+		
1529	**sodium cyanide**	wä	GL	20	+	+	+	+	+	-	+	+		+			+	+	+	+	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	-	+	+		+			+		+	+	0	+	+	+		+
		wä	GL	60	+	+	+	+		-	+	+		+			+		+	+	-	+	+	+		+
NaCN		wä	GL	80		+		+			+	+					+		+				+	+		
CNNa		wä	GL	100							+	+					+							+		
1530	**sodium fluoride**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+		+	+	+					+	0	+	+	+	+	+	+	+	+
NaF		wä	GL	80		+				+	+	+					+						+	+		
FNa		wä	GL	100						0	+	+					+						+	+		
1531	**sodium formate**	wä	GL	20		+	+	+	+		+	+		+			+		+				+	+		+
formic acid sodium salt		wä	GL	40		+	+	+	+		+	+		+			+		+				+	+		+
		wä	GL	60		+	+	+	+		+	+					+						+	+		+
HCO2Na		wä	GL	80		+					+	+					+						+	+		
CHNaO2		wä	GL	100							+	+					+						+	+		
1533	**sodium hypophosphite**	wä	GL	20	+		+	+	+		+	+					+		+				+	+	+	+
sodium phosphinate		wä	GL	40	+		+	+	+		+	+					+		+				+	+	+	+
		wä	GL	60	0		+	+	+		+	+					+						+	+		+
NaH2PO2		wä	GL	80							+	+					+						+	+		
H2NaPO2		wä	GL	100							+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1534	**sodium iodide**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	0	+	+	+	0	+	+	+	+
NaI		wä	GL	80		+				+	+	+					+						+	+	+	
INa		wä	GL	100						+	+	+					+						+	+	+	
1535	**sodium lactate**	wä	GL	20	+		+	+	+		+	+					+		+				+	+	+	+
lactic acid sodium salt		wä	GL	40			+	+	+		+	+					+		+				+	+	+	+
		wä	GL	60							+	+					+						+	+	+	+
CH3CH(OH)CO2Na		wä	GL	80							+	+					+						+	+		
C3H5NaO3		wä	GL	100							+	+					+						+	+		
1536	**sodium nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+		+
NaNO3		wä	GL	80		+				+	+	+		+			+						+	+		
NNaO3		wä	GL	100						+	+	+		+			+						+	+		
1537	**sodium nitrite**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	0	+	+	+	+	+	+	+	+
		wä	GL	60		+	+	+	+	+	+	+		+			+	-	+	+	+	+	+	+		+
NaNO2		wä	GL	80		+				+	+	+		0			+				+	0	+	+		
NNaO2		wä	GL	100						+	+	+					+						+	+		
1538	**sodium perchlorate**	wä	GL	20	+	+	+	+	+	+	+	+					+	0	+	0	+	+	+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+					+	0	+	0	+	+	+	+		+
		wä	GL	60		+	+	+	+	+	+	+					+	0	+	0	+	+	+	+		+
NaClO4		wä	GL	80		+					+	+					+		+		+		+	+		
ClNaO4		wä	GL	100							+	+											+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1539	**sodium peroxide**	wä	GL	20	+		0	0	0	+	+	+											+	+		+
		wä	GL	40	+		-	-	-	+	+	+											+	+		
		wä	GL	60						+	+	+														
Na2O2		wä	GL	80						+	+	+														
Na2O2		wä	GL	100							+	+														
1540	**sodium persulfate**	wä	GL	20	+		+	+	+	+	+	+					+	-	+	+	+	+	+	+		+
sodium peroxodisulfate		wä	GL	40	+		+	+	+	+	+	+					+		+	+	+	+	+	+		+
		wä	GL	60	0		+	+	+	+	+	+					+		+	0	+	+	+	+		+
Na2S2O8		wä	GL	80						+	+	+					+		+		+	0	+	+		
Na2O8S2		wä	GL	100							+	+									+		+	+		
1541	**sodium phosphate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
trisodium phosphate		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+		+	+	+		+	+	+	+	+	+	+	+	+	+	+		+
Na3PO4		wä	GL	80		+		+		0	+	+		+	+	+	+						+	+		
Na3O4P		wä	GL	100							+	+		0			+						+	+		
1542	**sodium silicate**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
sodium metasilicate		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		+
soda water glass		wä	GL	60	0	+	+	+		0	+	+			+	+	+	+	+	+	0	+	+	+		+
Na2SiO3		wä	GL	80		+				-	+	+					+							+		
Na2O3Si		wä	GL	100							+	+					+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1543	**sodium sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
Na2SO4		wä	10%	80		+		+	+	+	+	+			+	+	+		+		+		+	+	+	+
Na2O4S		wä	10%	100						+	+	+			+	+	+						+	+	+	+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+			+	+	+		+		+		+	+	+	+
		wä	GL	100						+	+	+			+	+	+						+	+	+	+
1544	**sodium sulfide**	wä	GL	20	+	+	+	+	+	0	+	+				+	+	+	+			+		+	+	+
		wä	GL	40	+	+	+	+	+	0	+	+				+	+	+	+			+		+	+	+
		wä	GL	60	0	+	+	+	+	0	+	+				+	+	+	+			+		+		+
		wä	GL	80		+					+	+				+	+	0	+					+		
Na2S		wä	GL	100							+	+					+	0						+		
1545	**sodium sulfite**	wä	GL	20	+	+	+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+	0	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+	-	+	0	+	+	+	+	+	+
Na2SO3		wä	GL	80		+		+	+	+	+	+					+						+		+	
Na2O3S		wä	GL	100						+	+	+					+						+		+	
1546	**sodium tetraborate**	wä	GL	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
disodium tetraborate		wä	GL	40	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
borax		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+	+	+	+	+	0	+	+	+	+
Na2B4O7		wä	GL	80		+		+	+	+	+	+			+	+	+		+				+	+		
B4Na2O7		wä	GL	100						+	+	+			+	+	+						+	+		

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Chemical Resistance

Release Date: 2016-07-01

1547	soda lye	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
sodium hydroxide		wä	5%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		+	+	+	+		+
caustic soda		wä	5%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
NaOH		wä	5%	60	+	+	+	+			+	+					+		+			+	+	+		
HNaO		wä	5%	80		+		+			+	+					+		+							
		wä	5%	100							+	+														
		wä	10%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		+	+	+	+		+
		wä	10%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	10%	60	+	+	+	+			+	+					+		+			+	+	+		
		wä	10%	80		+		+			+	+					+		+							
		wä	10%	100							+	+														
		wä	15%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	15%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	15%	60	0	+	+	+			+	+					+		+				+	+		
		wä	15%	80		+		+			+	+					+		+							
		wä	15%	100							+	+														
		wä	25%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	25%	40	+	+	+	+	+		+	+		+			+		+		-	+	+	+		+
		wä	25%	60	0	+	+	+			+	+					+		+				+	+		
		wä	25%	80		+		+	-		+	+					+		+							-
		wä	25%	100							+	+														
		wä	30%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	30%	40	+	+	+	+	+		+	+		+			+		+		-	0	+	+		+
		wä	30%	60	0	+	+	+			+	+					+		+			-	+	+		
		wä	30%	80		+		+	-		+	+					+									-
		wä	30%	100							+	+														
		wä	40%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		0	+	+	+		+
		wä	40%	40	+	+	+	+	+		+	+		+			+		+		-	0	+	+		+
		wä	40%	60	0	+	+	+			+	+					+		+			-	+	+		

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	40%	80		+			-		+	+					+									-
		wä	40%	100							+	+														
		wä	50%	20	+	+	+	+	+	-	+	+		+	0	0	+		+		-	+	+	+		+
		wä	50%	40	+	+	+	+	+		+	+		+			+		+		-	0	+	+		+
		wä	50%	60	0	+	+	+			+	+					+		+			-	+	+		
		wä	50%	80		+			-		+	+					+									-
		wä	50%	100							+	+														
1548	**nickel(II) chloride**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
NiCl2		wä	GL	80		+				+	+	+					+		+		+		+	+	+	
Cl2Ni		wä	GL	100						+	+	+					+						+	+	+	
1549	**nickel(II) nitrate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+		+	+	+	+	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+					+				+		+	+	+	+
Ni(NO3)2		wä	GL	80						+	+	+					+						+	+		
N2NiO6		wä	GL	100						+	+	+					+						+	+		
1550	**nickel(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+
NiSO4		wä	GL	80		+		+	+	+	+	+			+	+	+				+	+	+	+	+	+
NiO4S		wä	GL	100						+	+	+			+	+	+						+	+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1551	**nickel(II) sulfide**	wä	TR	20							+	+						+	+	+	+	+				
		wä	TR	40							+	+						+	+	+	+	+				
		wä	TR	60							+	+						+	+	+	+	+				
		wä	TR	80							+	+							+		+					
NiS		wä	TR	100							+	+									+					
1552	**nickel(II) sulfite**	wä	GL	20			+	+	+		+	+					+	+	+	+	+	+	+	+		+
		wä	GL	40			+	+	+		+	+					+	+	+	+	+	+	+	+		+
		wä	GL	60			+	+	+		+	+					+	+	+	+	+	+	+	+		+
NiSO3		wä	GL	80							+	+							+		+		+	+		
NiO3S		wä	GL	100							+	+									+		+	+		
1553	**nickel(II) tartrate**	wä	GL	20			+	+	+		+	+					+	+	+	+	+	+	+	+		+
L(+)-tartaric acid nickel salt		wä	GL	40			+	+	+		+	+					+	+	+	+	+	+	+	+		+
		wä	GL	60			+	+	+		+	+					+	+	+	+	+	+	+	+		+
Ni[CO2CH(OH)CH(OH)CO2]		wä	GL	80							+	+							+		+		+	+		
C4H4NiO6		wä	GL	100							+	+									+		+	+		
1554	**(S)-(-)-nicotine**	wä	VL	20			+	+	+	+	+	+		+		+		+	+	+	+	+				
(S)-(-)-1-methyl-2-(3-pyridyl)pyrrolidine		wä	VL	40						+	+	+														
		wä	VL	60						+	+	+														
		wä	VL	80							+	+														
C10H14N2		wä	VL	100							+	+														
1555	**nicotinic acid**	wä	VL	20	+		+			+	+	+														
pyridine-3-carboxylic acid		wä	VL	40	+		+			+	+	+														
niacin		wä	VL	60	+					+	+	+														
		wä	VL	80						+	+	+														
C6H5NO2		wä	VL	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1556	**nitrobenzene**		TR	20	-	-	+	+	+	+	+	+		-	+	+	+	0	-	-	0	-	+	+		+
			TR	40		-	0	0	0	0	+	+			+	+	+	-	-	-	-	-	-	+		+
			TR	60		-	0	0	0	-	+	+			+	+	+	-			-			+		+
			TR	80		-					+	+			+	+	+							+		+
C6H5NO2			TR	100							+	+			+	+	+							+		+
			TR	120							+	+			+	+	+							+		+
1557	**nitrobenzoic acid (o-, m- a. p-)**	wä	VL	20	+		+	+	+		+	+														
		wä	VL	40							+	+														
		wä	VL	60							+	+														
O2NC6H4CO2H		wä	VL	80							+	+														
C7H5NO4		wä	VL	100							+	+														
1559	**nitroglycol**	wä	VL	20	-		-	-	-	-	+	+				+		-	+	+	+	+				
ethylene glycol dinitrate		wä	VL	40							+	+														
		wä	VL	60							+	+														
O2NOCH2CH2ONO2		wä	VL	80							+	+														
C2H4N2O6		wä	VL	100							+	+														
1560	**nitrophenol (o-, m- a. p-)**	wä	GL	20	-						+	+	+													
		wä	GL	40							+	+	+													
		wä	GL	60							+	+														
O2NC6H4OH		wä	GL	80							+	+														
C6H5NO3		wä	GL	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1562	**nitrotoluene (o-, m- a. p-)**		TR	20	-		+	+	+	+	+	+	+					0	-	-	0	-				
			TR	40			+	+	+	+	+	+	+					-			-					
			TR	60			0	0	0	+	+	+														
CH3C6H4NO2			TR	80						+	+	+														
C7H7NO2			TR	100						0	+	+														
			TR	120							+	+														
1563	**fruit pulp**			20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+				
				40			+	+	+	+	+	+														
				60			+	+	+	+	+	+														
				80						+	+	+														
				100							+	+														
1564	**fruit juice, not fermented**			20	+		+	+	+	+	+	+						+	+	+	+	+				
				40			+	+	+	+	+	+														
				60			+	+	+	+	+	+														
				80							+	+														
				100							+	+														
1565	**fruit juice, fermented**			20	+		+	+	+	+	+	+						+	+	+	+	+				
				40			+	+	+	+	+	+														
				60			+	+	+	+	+	+														
				80							+	+														
				100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1566	**octane**		TR	20						+	+	+			+	+	+		-	-	+		+	+		+
			TR	40						+	+	+			+	+	+				+		+	+		+
			TR	60						+	+	+			+	+	+						+	+		+
CH3(CH2)6CH3			TR	80						+	+	+			+	+	+						+	+		+
C8H18			TR	100						+	+	+			+	+	+						+	+		+
			TR	120						+	+	+			+	+	+							+		0
1567	**octyl tolyl ether (o-, m-, a. p-)**		TR	20	-		0	0	0		+	+							-		0	-				
octyloxytoluene (o-, m-, a. p-)			TR	40	-		-	-	-		+	+							-			-				
			TR	60	-		-	-	-		+	+							-			-				
H3CC6H4OCH2(CH2)6CH3			TR	80							+	+														
C15H24O			TR	100							+	+														
			TR	120							+	+														
1569	**oil (vegetable + animal)**			20	+		+	+	+	+	+	+						+	-	0	+	0				
				40	+		+	+	+	+	+	+						+	-	0	+	0				
				60	+		0	0	0	+	+	+						+	-	-	+	-				
				80						+	+	+														
				100						+	+	+														
1570	**oleum**		10% SO3	20	-		-	-	-	-	+	+	-	-				-	-	-	-	-				
			10% SO3	40							+	+														
			10% SO3	60							+	+														
H2SO4 + SO3			10% SO3	80							+	+														
H2O4S + O3S			10% SO3	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1571	**oleum vapours**	gf	GK	20	+		-	-	-	+	+	+						-	0	-	+	0				
		gf	GK	40			-	-	-		+	+						-		-						
		gf	GK	60			-	-	-		+	+						-		-						
SO3		gf	GK	80			-	-	-		+	+						-		-						
O3S		gf	GK	100			-	-	-		+	+						-		-						
		gf	GK	120			-	-	-									-		-						
		gf	HK	20	-		-	-	-	+	+	+						-	0	-	+	0				
		gf	HK	40							+	+														
		gf	HK	60							+	+														
		gf	HK	80							+	+														
		gf	HK	100							+	+														
		gf	HK	120							+	+														
1572	**olive oil**			20	+	0	+	+	+	+					+	+		+	-	+	+	+	+	+		+
				40	+	0	+	+	+	+					+	+		+	-	+	+	+	+	+		+
				60	+	0	0	0	0	+					+	+		+	-	+	+	0	+	+		+
				80		0		0	0	+					+	+			-		+	-	+	+		+
				100											+	+			-			-	+	+		+
1573	**oleic acid**		TR	20	+		+	+	+	+	+	+		+			+	0	-	-	+	-		+		
cis-9-octadecenoic acid			TR	40	+		+	+	+	+	+	+		+			+	-			0			+		
			TR	60	+		0	0	0	+	+	+		+			+				-			+		
CH3(CH2)7CH=CH(CH2)7CO2H			TR	80			-	-	-	+	+	+					+							+		
C18H34O2			TR	100						+	+	+					+							+		
			TR	120						+	+	+					+							+		

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Chemical Resistance

Release Date: 2016-07-01

1574	phosphoric acid	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
orthophosphoric acid		wä	10%	20	+	+	+	+	+	+	+	+	0	+	+	+	+	0	+	+	+	+	+	+		+
		wä	10%	40	+	+	+	+	+	+	+	+	-	+	+	+	+		+		+	+	+	+		+
		wä	10%	60	0	+	+	+		+	+	+		+	+	+	+		+		+	+	+	+		+
H3PO4		wä	10%	80		+		+		+	+	+			+	+	+		+		+		+	+		+
H3O4P		wä	10%	100						+	+	+			+	+	+				+		+	+		
		wä	30%	20	+	+	+	+	+	+	+	+	0	+	+	+	+	0	+	+	+	+	+	+		+
		wä	30%	40	+	+	+	+	+	+	+	+	-	+	0	+	+		+		+	+	+	+		+
		wä	30%	60	0	+	+	+		+	+	+		+	-	0	+		+		+	+	+	+		+
		wä	30%	80		+		+		+	+	+							+		+		+	+		+
		wä	30%	100						+	+	+									+		+	+		
		wä	50%	20	+	+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	+	+	+		+
		wä	50%	40	+	+	+	+	+	+	+	+		+	0	+	+		+		+	+	+	+		+
		wä	50%	60	0	+	+	+		+	+	+			-	0	+		+		+	+	+	+		+
		wä	50%	80		+				+	+	+							0		+		+	+		+
		wä	50%	100						+	+	+									0		+	+		
		wä	60%	20	+	+	+	+	+	+	+	+	-	+	+	+	+	-	+	+	+	+	+	+		+
		wä	60%	40	+	+	+	+	+	+	+	+		+	0	+	+		+		+	+	+	+		+
		wä	60%	60	0	+	+	+		+	+	+			-	0	+		+		+	+	+	+		+
		wä	60%	80		+				+	+	+							0		+		+	+		+
		wä	60%	100						+	+	+									0		+	+		
		wä	85%	20	+	+	+	+	+	+	+	+	-				+	-	0	0	+	+	+	+		+
		wä	85%	40	+	+	+	+		+	+	+					+		0		+	+	+	+		+
		wä	85%	60	0	+	0	0		+	+	+			-	-	+		0		+	+	+	+		+
		wä	85%	80		+				+	+	+							0		+		+	+		+
		wä	85%	100						+	+	+									0		+	+		
		wä	85%	120							+	+														
		wä	95%	20	+	+	+	+	+	+	+	+	-				+	-	0	0	+	+	+	+		+
		wä	95%	40	+	+	+	0		+	+	+					+		0		+	+	+	+		+

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+ = resistant; 0 = conditionally resistant; - = non-resistant

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		wä	95%	60		+		-	-	+	+	+			-	-	+		0		+	+	+	+		+
		wä	95%	80		+				+	+	+									+		+	+		
		wä	95%	100						+	+	+									0		+	+		
		wä	95%	120							+	+														
1575	**oxalic acid**	wä	10%	20	+	+	+	+	+	+	+	+			+	+	+	0	+	+	+	+	+	+	+	+
ethanedioic acid		wä	10%	40	+	+	+	+	+	+	+	+			0	+	+	-	+	0	+	0	+	+	+	+
		wä	10%	60	+	+	+	+	+	0	+	+		0	0	0	-					-	+	+	+	
HO2CCO2H		wä	10%	80		0		0	0	-	+	+			-	0							+	+		
C2H2O4		wä	10%	100							+	+				-							+	+		
1576	**ozone**	gf	2%in Luft	20	+		0	0	0	+	+	+		+		+		-	+	0	+	+				
trioxygen		gf	2%in Luft	40	+		-	-	-	+	+	+				+			+	-	0	0				
		gf	2%in Luft	60						0	+	+				+			+							
		gf	2%in Luft	80							+	+														
O3		gf	2%in Luft	100							+	+														
		wä	GL	20	+		0	0	0	+	+	+						-	+	0	+	+				
		wä	GL	40	+		-	-	-	+	+	+							0	-	0	0				
		wä	GL	60						+	+	+							-		-	-				
		wä	GL	80						0	+	+														
		wä	GL	100							+	+														
1578	**palmitic acid**		TR	20	+		0	0	0	+	+	+		+				0	0	+	+	0				
hexadecanoic acid			TR	40				0	0	+	+	+						-	-	-	0	-				
cetylic acid			TR	60				-	-	+	+	+									-					
CH3(CH2)14CO2H			TR	80						+	+	+														
C16H32O2			TR	100						+	+	+														
			TR	120						+																

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1579	**palm kernel oil**			20	+	0	+	+	+	+	+	+		+	+	+	+	+	+	+	+	0				
palm seed oil				40	-	0	+	+	+	+	+	+			+	+	+	+	0	0	+	-				
				60		0	0	0	0	+	+	+			+	+	+	0	-	-	+					
				80		0				+	+	+														
				100						+	+	+														
1580	**paraffins**			20	+	+	+	+	+	+	+	+		+	+	+	+	+	-	+	+	0				
				40	0		+	+	+	+	+	+			+	+	+	+		0	+	-				
				60	0		+	0	0	+	+	+			+	+	+	0		-	+					
				80						+	+	+														
				100						+	+	+														
				120						+																
1582	**p-toluenesulfonic acid**	wä	10%	20	+		+	+	+	+	+	+					+	0	+	0	+	0	+	+	+	+
4-methylbenzenesulfonic acid		wä	10%	40	+		+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	10%	60						+	+	+					+				+		+	+	+	+
CH3C6H4SO3H		wä	10%	80							+	+					+						+	+		+
C7H8O3S		wä	10%	100							+	+					+						+	+		
		wä	50%	20	+		+	+	+	+	+	+					+	-			+		+	+	+	+
		wä	50%	40			+	+	+	+	+	+					+				+		+	+	+	+
		wä	50%	60						+	+	+					+						+	+		+
		wä	50%	80							+	+					+						+	+		+
		wä	50%	100							+	+					+						+	+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1583	**pentanol (mixture of isomers)**		TR	20	+		+	+	+	+	+	+	-	+	+	+	+	+	+	+	0	0	+	+		+
amyl alcohol (mixture of isomers)			TR	40	+		+	+	+	+	+	+		0	+	+	+	+	+	+			+	+		+
			TR	60	0		+	+	+	+	+	+		0	+	+	+	+	+	+			+	+		+
			TR	80						+	+	+			+	+	+						+	+		+
C5H12O			TR	100						+	+	+			+	+	+						+	+		+
			TR	120						0	+	+			+	+	+							+		+
1584	**perchloroethane**		TR	20	-		0	0	0	+	+	+														
hexachloroethane			TR	40						+	+	+														
			TR	60						+	+	+														
Cl3CCCl3			TR	80							+	+														
C2Cl6			TR	100							+	+														
1585	**perchloric acid**	wä	10%	20	+	+	+	+	+	+	+	+	-	-		0		-	0	-		0	+		-	+
		wä	10%	40	+		+	+	+	+	+	+							-				+		-	+
		wä	10%	60	0		+	+	+	+	+	+														+
		wä	10%	80						+	+	+														
HClO4		wä	10%	100						+	+	+														
		wä	70%	20	0		0	0	0	+	+	+	-	-		0		-	0	-		0	+		-	+
		wä	70%	40	-		-	-	-	+	+	+							-				+		-	+
		wä	70%	60			-			+	+	+														+
		wä	70%	80						+	+	+														
		wä	70%	100						+	+	+														
		wä	70%	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1586	**kerosene**		TR	20	+		+	+	+	+	+	+	+		+	+	+	+	-	0	+	-	+	+		+
			TR	40			+	0	0	+	+	+			+	+	+	+		-	+		+	+		+
			TR	60			0	0	0	+	+	+			+	+	+	+			0		+	+		+
			TR	80						+	+	+			+	+	+						+	+		+
			TR	100						+	+	+			+	+	+						+	+		+
			TR	120						+	+	+			+	+	+							+		+
1588	**phenol**	wä	10%	20	+	-	+	+	+	+	+	+		-	+	+	+	-	+	0	+	0	+	+		+
hydroxybenzene		wä	10%	40	0	-	+	+	+	+	+	+			+	+	+		+	-	+	-	+	+		+
		wä	10%	60	0	-	0	+	+	+	+	+			+	+	+		+		+		+	+		+
C6H5OH		wä	10%	80		-				+	+	+			+	+	+		0		0		+	+		
C6H6O		wä	10%	100						+	+	+			+	+	+						+	+		
		wä	90%	20	-	-	+	+	+	+	+	+			+	+	+	-	-	-	+	-	+	+		+
		wä	90%	40	-	-	+	+	+	+	+	+			+	+	+			0	0		+	+		+
		wä	90%	60	-	-	0	0	0	+	+	+			+	+	+				-		+	+		+
		wä	90%	80		-				+	+	+			+	+	+						+	+		
		wä	90%	100						+	+	+			+	+	+						+	+		
1590	**phenylhydrazine**		TR	20	-	-	0	0	0	+	+	+						-	0	-	+	-				
			TR	40		-				+	+	+									+					
			TR	60		-					+	+									0					
C6H5NHNH2			TR	80		-					+	+														
C6H8N2			TR	100							+	+														

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1591	**phosgene**	gf	HK	20	+		0	0	0	0	+	+						+	+	+	+	+				
carbonyl dichloride		gf	HK	40	0		0	0	0	0	+	+						+	+	0	+	0				
carbonic acid dichloride		gf	HK	60	0		0				+	+						+	+	-	0					
COCl2		gf	HK	80							+	+														
CCl2O		gf	HK	100							+	+														
		gf	HK	120							+	+														
1594	**phosphine**	gf	TR	20	+					+	+	+		0		+		-	+	+	+	+				
phosphane		gf	TR	40	+					+	+	+														
		gf	TR	60							+	+														
PH3		gf	TR	80							+	+														
H3P		gf	TR	100							+	+														
1595	**phosphorus(III) chloride**		TR	20	-	-	0	0	-	+	+	+	-	-				-		-	0					
phosphorus trichloride			TR	40			-	-		+	+	+														
			TR	60						+	+	+														
PCl3			TR	80						0	+	+														
Cl3P			TR	100						0	+	+														
1596	**phosphorus(V) oxide**		TR	20	+		+	+	+	+	+	+						0	+	+	+	+				
phosphorus pentoxide			TR	40	+		+			+	+	+						-	+	+	+	+				
			TR	60						+	+	+							+	+	+	+				
P4O10			TR	80						+	+	+														
O10P4			TR	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1597	**phosphoryl chloride**		TR	20	-		+	+	-	+	+	+														
phosphoroxy chloride			TR	40			+			+	+	+														
phosphoric acid trichloride			TR	60			0			+	+	+														
POCl3			TR	80							+	+														
Cl3OP			TR	100							+	+														
1598	**phthalic acid**	wä	GL	20	+		+	+	+	+	+	+		+			+	-	+	0	-	+		+	+	+
benzene-1,2-dicarboxylic acid		wä	GL	40	0		+	+	+	+	+	+					+		+	0		+		+	+	+
		wä	GL	60	-		+	+	+	+	+	+					+		0	0				+	+	+
C6H4(CO2H)2		wä	GL	80						+	+	+					+							+		
C8H6O4		wä	GL	100						+	+	+					+							+		
1599	**phthalic acid monopentyl ester**		TR	20	-	-	+	+	+		+	+		-	+	+	+						+	+		+
monopentyl phthalate			TR	40							+	+			+	+	+						+	+		+
Monoamyl phthalate			TR	60							+	+			+	+	+						+	+		+
2-(HO2C)C6H4CO2CH2(CH2)3CH3			TR	80							+	+			+	+	+							+		+
C13H16O4			TR	100							+	+			+	+	+							+		+
1600	**phthalic acid monobutyl ester**		TR	20	-	-	+	+	+		+	+		-	+	+	+						+	+		+
monobytyl phthalate			TR	40			+				+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+						+	+		+
2-(HO2C)C6H4CO2CH2(CH2)2CH3			TR	80							+	+			+	+	+							+		+
C12H14O4			TR	100							+	+			+	+	+							+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1601	**picric acid**	wä	VL	20	+	-	+	+	+	+	+	+			+	+	+	+	+	0	+	+				
2,4,6-trinitrophenol		wä	VL	40		-	+			+	+	+						-	+	-	+	0				
		wä	VL	60		-				+	+	+							0		+	-				
C6H2(NO2)3OH		wä	VL	80		-				+	+	+														
C6H3N3O7		wä	VL	100						+	+	+														
		wä	GL	20	+	-	+	+	+	+	+	+			+	+	+	0	0	+	+	0				
		wä	GL	40		-	+			+	+	+							-	-	+	-				
		wä	GL	60		-				+	+	+									0					
		wä	GL	80		-					+	+														
		wä	GL	100							+	+														
1603	**polyaluminium chloride**	wä	10%	20	+		+	+	+	+	+	+	+	+	-	0	+	+	+	+	+	+	+	+	+	+
PAC		wä	10%	40	+		+	+	+	+	+	+	+	+		-	+	+	+	+	+	+	+	+	+	+
		wä	10%	60	+		+	+	+	+	+	+	0	0			+		+	+	+	+	+	+	+	+
AIn(OH)xCl3n-x		wä	10%	80				+	+	+	+	+					+		+		+	+	+	+		+
HxAlnCl3n-xOx		wä	10%	100						+	+	+					+				+	+	+	+		+
		wä	GL	20	+		+	+	+	+	+	+			-	-	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+		+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
		wä	GL	80				+	+	+	+	+					+		+		+	+	+	+		+
		wä	GL	100						+	+	+					+				+	+	+	+		+
1604	**polyethylene glycol**		TR	20			+	+	+		+	+					+		+		+		+	+		+
polyglycol, PEG			TR	40			+	+	+		+	+					+		+		+		+	+		+
Carbowax			TR	60			+	+	+		+	+					+						+	+		+
HO(CH2CH2O)nH			TR	80							+	+					+							+		+
C2H4O			TR	100							+	+					+							+		+
			TR	120							+	+					+							+		+

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1605	**propane**	gf	HK	20	+		+	+	+	+	+	+		+				+	-	+	+	-				
		gf	HK	40			+			+	+	+		+												
		gf	HK	60						+	+	+		+												
CH3CH2CH3		gf	HK	80						+	+	+														
C3H8		gf	HK	100							+	+														
1606	**1-propanol**		TR	20	+	0	+	+	+	+	+	+	-		+	+	+	0	+	+	+	0	+	+		+
propyl alcohol			TR	40	0	0	+	+	+	+	+	+			+	+	+	0	+	+	+	0	+	+		+
			TR	60	0	0	+	+	+	+	+	+			+	+	+	-	+	0	+	0	+	+		+
CH3CH2CH2OH			TR	80		0				0	+	+			+	+	+		0		0			+		+
C3H8O			TR	100							+	+			+	+	+				-			+		+
1607	**propargyl alcohol**	wä	10%	20	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+		+		+
2-propin-1-ol		wä	10%	40	+		+	+	+	0	+	+			+	+	+	+	+	+	+	+		+		+
ethinylcarbinol		wä	10%	60	+		+	+	+	0	+	+			+	+	+	+	+	0	+	0		+		+
HCCCH2OH		wä	10%	80							+	+			+	+	+							+		
C3H4O		wä	10%	100							+	+			+	+	+							+		
1608	**propionic acid**	wä	50%	20	+	-	+	+	+	+	+	+		+		+	+	-	+	0	+	0		+		+
propanoic acid		wä	50%	40	+		+	+	+	+	+	+				+	+		+	-	+	-		+		+
methylacetic acid		wä	50%	60	0		+	+		+	+	+				+	+		+		0			+		+
CH3CH2CO2H		wä	50%	80							+	+					+							+		
C3H6O2		wä	50%	100							+	+					+							+		
			TR	20	+	-	+	+	+	+	+	+				+	+	-	+	-	+	-	+	+		+
			TR	40	0		0	0	0	+	+	+					+		+		+			+		+
			TR	60			0	0	0	+	+	+					+		0		+			+		+
			TR	80							+	+					+				0			+		
			TR	100							+	+					+							+		

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1609	**1,2-propanediol**		TR	20		0	+	+	+		+	+	-	+	+	+	+	+	+	+	+	+	+	+		+
propylene glycol			TR	40		0	+	+	+		+	+		+	+	+	+	0	+	+	+	+	+	+		+
			TR	60		0	+	+	+		+	+		+	+	+	+	-	+	+	0	+	+	+		+
CH3CH(OH)CH2OH			TR	80		0					+	+			+	+	+							+		
C3H8O2			TR	100							+	+			+	+	+							+		
			TR	120							+	+			+	+	+							+		
1610	**propylene oxide**		TR	20	0	-	+	+	+	-	+	+						-	+	-	-	-				
1,2-epoxypropane																										
propene oxide																										
C3H6O																										
1611	**pyridine**		TR	20	-	-	+	0	0	+	+	+	-	0			+	-	+	-	-	0	+	+		+
			TR	40		-	0	0	0	0	+	+					+		0		-	-	+	+		+
			TR	60		-	0	0	0	-	+	+					+		-					+		+
			TR	80		-					+	+					+							+		
C5H5N			TR	100							+	+					+							+		
1612	**mercury**		TR	20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			+
			TR	40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			+
			TR	60	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			+
			TR	80		+				+	+	+									+		+			+
Hg			TR	100						+	+	+											+			+
			TR	120						+	+	+											+			+

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1613	**murcury(II) sulfate**	wä	GL	20	+	+	+	+	+	+	+	+		+			+				+		+	+		+
		wä	GL	40	+	+	+	+	+	+	+	+		+			+				+		+	+		+
		wä	GL	60		+	+	+	+	+	+	+		+			+						+	+		+
HgSO4		wä	GL	80		+				+	+	+					+							+		
HgO4S		wä	GL	100						+	+	+														
1614	**mercury(II) chloride**	wä	VL	20	+	+	+	+	+	+	+	+			+	+	+	+	+		+	+	+	+	+	+
		wä	VL	40	+	+	+	+	+	+	+	+			+	+	+	+	+		+	+	+	+	+	+
		wä	VL	60	0	+	+	+	+	+	+	+			+	+	+		+		+	+	+	+	+	+
HgCl2		wä	VL	80		+				+	+	+					+						+	+		
Cl2Hg		wä	VL	100							+	+					+						+	+		
		wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+		+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+		+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+			+	+	+		+		+	+	+	+	+	+
		wä	GL	80		+				+	+	+					+						+	+		
		wä	GL	100							+	+					+						+	+		
1615	**mercury(II) cyanide**	wä	VL	20	+	+	+	+	+	0	+	+					-		+		+		+	+		+
		wä	VL	40	+	+	+	+	+		+	+					-		+		0		+	+		+
		wä	VL	60	0	+	+	+			+	+					-						+	+		+
Hg(CN)2		wä	VL	80		+					+	+					-							+		
C2HgN2		wä	VL	100							+	+					-							+		
		wä	GL	20	+	+	+	+	+	-	+	+					-		+		0		+	+		+
		wä	GL	40	+	+	+	+	+		+	+					-		+		-		+	+		+
		wä	GL	60	0	+	+	+			+	+					-						+	+		+
		wä	GL	80		+					+	+					-							+		
		wä	GL	100							+	+					-							+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1616	**mercury(II) nitrate**	wä	25%	20	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	25%	40	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	25%	60	0	+	+	+	+	+	+	+					+						+	+	+	+
Hg(NO3)2		wä	25%	80		+				+	+	+					+							+		
HgN2O6		wä	25%	100						+	+	+					+							+		
		wä	GL	20	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+					+		+		+		+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+						+	+	+	+
		wä	GL	80		+				+	+	+					+							+		
		wä	GL	100						+	+	+					+							+		
1619	**roasting gases, dry**	gf	GK	20	+		+	+	+		+	+		+				-	+	+	+	+				
		gf	GK	40	+		+	+	+		+	+							+	+	+	+				
		gf	GK	60	+		+	+	+		+	+							+	+	+	+				
SO2		gf	GK	80							+	+							+	+	+					
O2S		gf	GK	100							+	+														
		gf	GK	120							+	+														
1620	**salicylic acid**	wä	GL	20	+		+	+	+	+	+	+					+	+		+	+		+	+	+	+
2-hydroxybenzoic acid		wä	GL	40	+		+	+	+	+	+	+					+	+		+	+		+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+					+	0		+	+		+	+	+	+
HOC6H4CO2H		wä	GL	80						+	+	+					+	-		-	+		+	+		
C7H6O3		wä	GL	100						0	+	+					+							+		

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1621	**nitric acid**	wä	10%	20	+	+	+	+	+	+	+	+	-	+			+	-	+	-	+	+	+	+	+	+
		wä	10%	40	+	+	+	0	0	+	+	+		+			+		+		+		+	+	+	+
		wä	10%	60	0	+		-	-	+	+	+					+				0			+		+
		wä	10%	80		+				+	+	+					+				-			+		+
HNO3		wä	10%	100						+	+	+					+							+		
		wä	30%	20	+	+	0	0	0	+	+	+	-	+			+	-	+	-	+		+	+	+	+
		wä	30%	40	+		0	-	-	+	+	+		0			+		0		-		+	+	+	+
		wä	30%	60	0					+	+	+					+							+		+
		wä	30%	80		0				+	+	+					+									+
		wä	30%	100						+	+	+					+									
		wä	50%	20	+	+	0	-	-	+	+	+	-	0			+	-	-	-	+		+	+	+	+
		wä	50%	40	+		-			+	+	+		-			+				-		+	+	0	+
		wä	50%	60	0					+	+	+					+							+		+
		wä	50%	80		-					+	+					+									+
		wä	65%	20	0	+	-	-	-	+	+	+	-	-			+	-	-	-	-	-	+	+	0	+
		wä	65%	40	0					+	+	+					+						+	+	-	+
		wä	70%	20	0	+	-	-	-	+	+	+	-	-			+	-	-	-	-	-	+	+	0	+
		wä	70%	40	-					+	+	+					+						+	+	-	+
		wä	98%	20	-	+	-	-	-	0	+	+	-	-				-	-	-	-	-	-		-	
		wä	98%	40						-	+	+														
1622	**nitrous acid**	wä	VL	20						+	+	+	-					0	+	0	+	+				
		wä	VL	40						+	+	+						-	+	-	+	0				
		wä	VL	60						+	+	+									+	-				
		wä	VL	80						+	+	+														
HNO2		wä	VL	100							+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1623	**hydrochloric acid**	wä	5%	20	+	+	+	+	+	+	+	+	0	+	-	-	+	0	+	0	+	+	+	+	+	+
		wä	5%	40	+	+	+	+	+	+	+	+		+			+	-	+	-	+	0	+	+	+	+
		wä	5%	60	0	+	+	+	+	+	+	+					+		+		+	-	+	+	+	+
		wä	5%	80		+		0	0	+	+	+					+		+				+	+	+	+
HCl		wä	5%	100						+	+	+														
		wä	10%	20	+	+	+	+	+	+	+	+	0	+	-	-	+	0	+	0	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+		+			+	-	+	-	+	0	+	+	+	+
		wä	10%	60	0	+	+	0		+	+	+					+		+		0	-	+	+	+	+
		wä	10%	80		+		0		+	+	+					+							+	+	+
		wä	10%	100						+	+	+														
		wä	20%	20	+	+	+	+	+	+	+	+	-	+	-	-	+	-	+		+	+	+	+	+	+
		wä	20%	40	+	+	+	+	+	+	+	+					+		+		0		+	+	+	+
		wä	20%	60	0	+	+	0		+	+	+					+				-			+	+	+
		wä	20%	80		+		0		+	+	+					+		-					+	+	+
		wä	20%	100							+	+														
		wä	30%	20	+	+	+	+	+	+	+	+	-	+	-	-	+	-	+	-	+	+	+	+	+	+
		wä	30%	40	+	+	+	+	0	+	+	+					+		+		0	0	+	+	+	+
		wä	30%	60	0	+	0	0		+	+	+					+				-	-		+	+	+
		wä	30%	80		+		-	-	+	+	+					+		-					+		
		wä	37%	20	+	+	+	+	+	+	+	+	-		-	-	+	-	+	-	+		+	+	+	+
		wä	37%	40	+		+	+	0	+	+	+					+		0		-		+	+	+	+
1624	**brine**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	-	-	+	+	+	+	+	+	+	+	+	+
NaCl		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+	+	+
ClNa		wä	GL	100						+	+	+					+						+	+	+	+

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1625	**oxygen**	gf	HK	20	+	+	+	+	+	+	+	+		+				-	+	+	+	+				
		gf	HK	40	+	+	+	0	0	+	+	+		+					+	+	+	+				
		gf	HK	60	+	+	0	0	0	+	+	+		+					+	+	+	+				
		gf	HK	80		+				0	+	+							+	+	+	+				
O2		gf	HK	100						0	+	+									+	+				
		gf	HK	120							+	+									+					
1627	**soap**			20	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
soft soap				40	+		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
				60	0		+	+	+	+	+	+					+	+	+	+	+	+	+	+	+	+
				80						+	+	+					+						+	+		
				100						+	+	+					+						+	+		
1628	**sulfur**		TR	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
			TR	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
			TR	60			+	+	+	+	+	+			+	+	+		+		+	+	+			
			TR	80				+	+	+	+	+			+	+	+				+	+	+			
S8			TR	100						+	+	+			+	+	+				+	+	+			

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Chemical Resistance

Release Date: 2016-07-01

1629	sulfur dioxide, gaseous	Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
		gf, tr	HK	20	+		+	+	+	0	+	+		0		+	+	-	+	-	+	0				
		gf, fe	HK	20	+		+	+	+	+	+	+		+		+	+	-	+	-	+	0				
		gf, tr	HK	40	+		+	+	+	0	+	+				+	+		+		0	-				
SO2		gf, fe	HK	40	+		+	+	+	0	+	+							+							
O2S		gf, tr	HK	60						-	+	+				+	+		0							
		gf, fe	HK	60	0		+	+	+	-	+	+							0							
		gf, tr	HK	80							+	+														
		gf, fe	HK	80							+	+														
		gf, tr	HK	100							+	+														
		gf, fe	HK	100							+	+														
		gf, tr	Hk	120							+	+														
		gf, fe	HK	120							+	+														

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Chemical Resistance

Release Date: 2016-07-01

1632	sulfuric acid

H2SO4
H2O4S

Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
wä	5%	20	+	+	+	+	+	+	+	+	+	0	-	-	+	0	+	0	+	+	+	+	+	+
wä	5%	40	+	+	+	+	+	+	+	+		0			+	-	+	-	+	+	+	+	+	+
wä	5%	60	0	+	+	+	+	+	+	+					+		+		+	0	+	+		+
wä	5%	80		+		+	+	+	+	+							0		+	0	+	+		+
wä	5%	100						+	+	+							-			-	+	+		
wä	10%	20	+	+	+	+	+	+	+	+	0	0	-	-	+	0	+	0	+	+	+	+	+	+
wä	10%	40	+	+	+	+	+	+	+	+		0			+	-	+	-	+	+	+	+	+	+
wä	10%	60	0	+	+	+	+	+	+	+					+		+		+	0	+	+		+
wä	10%	80		+		+	+	+	+	+							0		+	0	+	+		+
wä	10%	100						+	+	+							-			-	+	+		
wä	20%	20	+	+	+	+	+	+	+	+		0	-	-	+	-	+	0	+	+	+	+	+	+
wä	20%	40	+	+	+	+	+	+	+	+		0			+		+	-	+	+	+	+	+	+
wä	20%	60	0	+	+	+	+	+	+	+					+		+		+	0	+	+		+
wä	20%	80		+		+	+	+	+	+							0		+	0	+	+		+
wä	20%	95						+	+	+							-		+	-	+	+		
wä	40%	20	+	+	+	+	+	+	+	+	-	0	-	-	+	0	+	0	+	+	+	+	+	+
wä	40%	40	+	+	+	+	+	+	+	+		0			+	-	+	-	+	+	+	+	+	+
wä	40%	60	0	+	+	+	+	+	+	+					+		+		+	0	+	+		+
wä	40%	80		+		+	+	+	+	+							0		+	0	+	+		+
wä	40%	100						+	+	+							-			-	+			
wä	50%	20	+	+	+	+	+	+	+	+	-	0	-	-	+	-	+	-	+	+	+	+	+	+
wä	50%	40	+	+	+	+	+	+	+	+		0			+		+		+	0	+	+	+	+
wä	50%	60	0	+	+	+	+	+	+	+					+		0		+	0	+	+		+
wä	50%	80		+		+	+	+	+	+							-		+	-	+	+		+
wä	50%	100						+	+	+											+			
wä	60%	20	+	+	+	+	+	+	+	+	-	0	-	-	+	-	+	-	+	+	+	+		+
wä	60%	40	+	+	+	+	+	+	+	+		0			+		+		+	0	+	+		+
wä	60%	60	0	+	+	+	+	+	+	+					+				+	0	+	+		+

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
GK = low concentration; GL = cold saturated solution; H = usual in trade; HK = high concentration; TR = technically pure; VL = diluted solution
+ = resistant; 0 = conditionally resistant; - = non-resistant

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Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
wä	60%	80		+		+	+	+	+	+							-		+	-	+	+		+
wä	60%	100						+	+	+											+			
wä	70%	20	+	+	+	+		+	+	+	-	0	-	-	+		+		+		+	+		+
wä	70%	40	+	+	+	+		+	+	+					+		+		+	0	+	+		+
wä	70%	60		+				+	+	+					+						+	+		+
wä	70%	80		+				+	+	+							-				+	+		+
wä	70%	100							+	+											+			
wä	80%	20	+	+	+	+		+	+	+	-	0	-	-	+	-	+	-	+	+	+	+		+
wä	80%	40	+	+	+	+		+	+	+					+		0		+	0	+	+		+
wä	80%	60	-	+	0	0		+	+	+					+		-		0	-	+	+		+
wä	80%	80		+				+	+	+									-		+	+		+
wä	80%	100						0	+	+											+			
wä	96%	20	0	0	-	-	-	+	+	+	-	-	-	-	+	-	-	-	0	-	+	+	-	+
wä	96%	40	-	-				+	+	+					+				-		+	+		+
wä	96%	60						0	+	+					+							+		+
wä	96%	80						-	+	+												+		+
wä	96%	100							+	+														
wä	98%	20	-	-	-	-	-	+	+	+	-	-			+	-	-	-	-	-	+	+	-	+
wä	98%	40						+	+	+					+						+	+		+
wä	98%	60						-	+	+			-	-	+						0	+		+
wä	98%	80							+	+											-	+		+
wä	98%	100							+	+														

Abbreviations: fe = humid; fl = liquid; gf = gaseous; tr = dry; wä = aqueous solution
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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1634	**sulfur trioxide**	gf	HK	20	-		-	-	-	0	+	+						-	-	-	-	-	+			
sulfuric acid anhydride		gf	HK	40							+	+											+			
		gf	HK	60							+	+											+			
SO3		gf	HK	80							+	+														
O3S		gf	HK	100							+	+														
		gf	HK	120							+	+														
1635	**hydrogen sulfide**	gf	HK	20	+	+	+	+	+	+	+	+		0				-	+	0	-	+	+			
		gf	HK	40	+	+	+	+	+	+	+	+						-	0	-	-	0	+			
		gf	HK	60	+	+	0	+	+	+	+	+						-	-		-	0	+			
		gf	HK	80		+				+	+	+									-	-	+			
H2S		gf	HK	100						+	+	+											+			
		gf	HK	120							+	+														
		wä	GL	20	+	+	+	+	+	+	+	+						-	+	0	-	+				
		wä	GL	40	+	+	+	+	+	+	+	+						-	0	-	-	+				
		wä	GL	60	0	+	+	+	+	+	+	+							-		-	0				
		wä	GL	80		+				+	+	+									-	-				
		wä	GL	100						+	+	+									-					
1636	**sulfurous acid**	wä	GL	20	+		+	+	+	+	+	+	-				+	-	+	-	+	0	+	+	+	+
sulfur dioxide, aqueous solution		wä	GL	40	+		+	+	+	+	+	+					+		0		+	0	+	+	+	+
		wä	GL	60	0		+	+	+	+	+	+					+		-		0	-	+	+	+	+
SO3 • xH2O ("H2SO3")		wä	GL	80						+	+	+					+				-			+		
O3S ("H2O3S")		wä	GL	100						+	+	+					+							+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1637	**soap hydrous solution**			20	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+				
				40	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+				
				60	0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+				
				80		+				+	+	+														
				100						+	+	+														
1638	**silver acetate**	wä	GL	20	+		+	+	+	+	+	+						+	+	+	+	+				
		wä	GL	40	+		+	+	+	+	+	+						+	+	+	+	+				
		wä	GL	60	0		+	+	+	+	+	+						+	+	+	+	+				
CH3CO2Ag		wä	GL	80						+	+	+														
C2H3AgO2		wä	GL	100						+	+	+														
1639	**silver chloride**	wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+
		wä	GL	60	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+		+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+	+	+
AgCl		wä	GL	100						+	+	+					+				+		+	+	+	
1640	**silver cyanide**	wä	GL	20	+	+	+	+	+	+	+	+						+	+	+	+	+				
		wä	GL	40	+	+	+	+	+	+	+	+						+	+	+	+	+				
		wä	GL	60	0	+	+	+	+	+	+	+						+	+	+	+	+				
AgCN		wä	GL	80		+				+	+	+														
CAgN		wä	GL	100							+	+														
1641	**silver nitrate**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
		wä	GL	40	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
		wä	GL	60	-	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
		wä	GL	80		+				+	+	+			+	+	+									
AgNO3		wä	GL	100						+	+	+			+	+	+									

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Chemical Resistance

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1642	**silver sulfate**	wä	GL	20		+					+	+									+		+	+	+	+
		wä	GL	40		+					+	+									+		+	+	+	+
		wä	GL	60		+					+	+									+		+	+	+	+
Ag2SO4		wä	GL	80		+					+	+									+		+	+	+	+
Ag2O4S		wä	GL	100							+	+												+		
1643	**silicone oil**		TR	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
polydimethylsiloxane			TR	40			+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
			TR	60			+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+
HO[Si(CH3)2O)]nH			TR	80				+	+	+	+	+			+	+	+						+	+	+	+
C2H6OSi			TR	100				+	+	+	+	+			+	+	+						+	+		+
			TR	120						+	+	+											+	+		+
1644	**sperm oil**			20	+		+	+	+	+	+	+				+		+	0	+	+	0				
				40							+	+														
				60							+	+														
				80							+	+														
				100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1646	**spin bath acid with carbondisulfide**		100mgCS2/L	20	+		+	+	+	+	+	+		0				-	+	-	+	0				
			100mgCS2/L	40	+		+	+	+	+	+	+														
			100mgCS2/L	60	+		-	0	0		+	+														
			100mgCS2/L	80							+	+														
			100mgCS2/L	100							+	+														
			200mgCS2/L	20	0		+	+	+	+	+	+						-	+	-	+	0				
			200mgCS2/L	40	0					+	+	+							+		+	0				
			200mgCS2/L	60							+	+														
			200mgCS2/L	80							+	+														
			200mgCS2/L	100							+	+														
			700mgCS2/L	20	-		+	+	+	+	+	+						-	0	-	+	-				
			700mgCS2/L	40						+	+	+							0		+					
			700mgCS2/L	60							+	+														
			700mgCS2/L	80							+	+														
			700mgCS2/L	100							+	+														
1649	**starch solution**			20	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+				
				40	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+				
				60	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+				
				80		+				+	+	+			+	+										
				100						+	+	+			+	+										
				120							+	+			+	+										
1650	**starch sirup**		H	20	+		+	+	+	+	+	+				+		+	+	+	+	+				
			H	40	+		+	+	+	+	+	+				+		+	+	+	+	+				
			H	60	+		+	+	+	+	+	+		+		+		+	+	+	+	+				
			H	80						+	+	+						+	+	+	+	+				
			H	100						+	+	+						+	+	+	+	+				

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1652	**stearic acid**		TR	20	+	+	+	+	+	+	+	+		-	+	+	+	+	+	+	+	0				
octadecanoic acid			TR	40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	0				
			TR	60	+		0	0	0	+	+	+			+	+	+	0	0	0	0	-				
CH3(CH2)16CO2H			TR	80						+	+	+				+	+									
C18H36O2			TR	100						+	+	+														
			TR	120						+																
1653	**stearic acid butyl ester**		TR	20			+	+	+	+	+	+			+	+	+	+	+	+	+	0				
butylstearate			TR	40			+	+	+	+	+	+			+	+	+	+	+	+	+	0				
octadecanoic acid butyl ester			TR	60			0	0	0	+	+	+			+	+	+	0	0	0	0	-				
CH3(CH2)16CO2CH2(CH2)2CH3			TR	80						+	+	+			+	+	+									
C22H44O2			TR	100						+	+	+			+	+	+									
			TR	120							+	+			+	+	+									
1655	**strontium chloride**	wä	GL	20		+					+	+							+		+		+	+		+
		wä	GL	40		+					+	+							+		+		+	+		+
		wä	GL	60		+					+	+							+		+		+	+		+
SrCl2		wä	GL	80		+					+	+							+		+		+	+		+
Cl2Sr		wä	GL	100							+	+											+	+		
1656	**styrene**		TR	20	-	-	0	0	0	-	+	+		-									+			
vinylbenzene			TR	40	-	-	-	0	0	-	+	+											+			
phenylethylene			TR	60		-		-	-		+	+														
C6H5CH=CH2			TR	80		-					+	+														
C8H8			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1657	**sulfamic acid**	wä	GL	20		+					+	+												+		+
aminosulfuric acid		wä	GL	40		+					+	+												+		+
amidosulfuric acid		wä	GL	60		+					+	+												+		+
H2NSO3H		wä	GL	80		+					+	+												+		+
H3NO3S		wä	GL	100							+	+												+		
1658	**SurTec 104 universal cleaner**	wä	8%	20	+		+	+	+	+	+	+			+	+	+		+		+		+	+	+	+
		wä	8%	40	+		+	+	+	+	+	+			+	+	+		+		+		+	+	+	+
		wä	8%	60	+		+	+	+	+	+	+			+	+	+		0		+		+	+	+	+
		wä	8%	80							+	+			+	+	+						+	+		+
		wä	8%	100							+	+			+	+	+						+	+		+
1659	**nitrogen**	gf	HK	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	60	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	80		+		+	+	+	+	+		+	+	+	+	+	+		+	+	+			
N2		gf	HK	100						+	+	+		+	+	+	+		+		+		+			
		gf	HK	120						+	+	+			+	+	+				+		+			
1660	**Tanigan® extra A**			20	+						+	+		-				+	+	+	+	+				
				40							+	+						+	+	+	+	+				
				60							+	+														
				80							+	+														
				100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1661	**Tanigan® extra B**			20	+						+	+		-				+	+	+	+	+				
				40							+	+						+	+	+	+	+				
				60							+	+														
				80							+	+														
				100							+	+														
1662	**Tanigan® extra D**			20	+						+	+						+	+	+	+	+				
				40	0						+	+						+	+	+	+	+				
				60	-						+	+														
				80							+	+														
				100							+	+														
1663	**Tanigan® F**			20	+						+	+						+	+	+	+	+				
				40	+						+	+						+	+	+	+	+				
				60	+						+	+														
				80							+	+														
				100							+	+														
1664	**Tanigan® U**			20							+	+						+	+	+	+	+				
				40							+	+						+	+	+	+	+				
				60							+	+														
				80							+	+														
				100							+	+														
1665	**tannin**	wä	GL	20	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+				
tannic acid		wä	GL	40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+				
gallotannic acid		wä	GL	60	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+				
		wä	GL	80						+	+	+														
		wä	GL	100						+	+	+														

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Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1666	**turpentine**		TR	20	+	-	0	-	-	+	+	+						+	-	-	+	-				
			TR	40	0	-	0				+	+						+			+					
			TR	60		-	0				+	+						+			+					
			TR	80		-					+	+														
			TR	100							+	+														
1667	**turpentine benzine**		TR	20	+		-	-	-	+	+	+			+	+	+	+	-	-	+	-				
			TR	40	+						+	+			+	+	+	+			+					
			TR	60							+	+					+	+			+					
			TR	80							+	+														
			TR	100							+	+														
1668	**oil of turpentine**		TR	20	+		0	-	-	+	+	+		0	+	+	+	+	-	-	+	-				
			TR	40	0		0				+	+			+	+	+	+			+					
			TR	60			0				+	+					+	+			+					
			TR	80							+	+														
			TR	100							+	+														
1669	**tetrabromomethane**		TR	20	-		-	-	-	+	+	+						-	-	-	-	-				
carbon tetrabromide			TR	40						+	+	+														
			TR	60							+	+														
			TR	80							+	+														
CBr4			TR	100							+	+														
1670	**1,1,2,2-tetrachloroethane**		TR	20	-	-	0	0	0	0	+	+		-				-	-	-	-	-	+			
acetylene tetrachloride			TR	40		-				0	+	+		-									+			
TCE			TR	60		-				0	+	+		-												
CHCl2CHCl2			TR	80		-					+	+														
C2H2Cl4			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1671	**tetrachloroethylene**		TR	20	-	-	0	0	0	+	+	+				-		0	-	-	0	-	+			
tetrachloroethene			TR	40		-	0			+	+	+						-			0		+			
perchloroethene			TR	60		-	-	0	0	+	+	+									0		+			
Cl2C=CCl2			TR	80		-				0	+	+											+			
C2Cl4			TR	100						0	+	+											+			
1672	**tetrachloromethane**		TR	20	0	-	-	-	-	+	+	+	+	0		+	+	-	-	-	+	-	0			
carbon tetrachloride			TR	40	-	-				+	+	+	+				+				+		0			
			TR	60		-				0	+	+					+				+					
			TR	80		-					+	+														
CCl4			TR	100							+	+														
1673	**tetraethyllead**		TR	20	+		+	+	+	+	+	+				+		0	0	-	+	-				
lead tetraethyl			TR	40						+	+	+														
TEL			TR	60						+	+	+														
(C2H5)4Pb			TR	80						+	+	+														
C8H20Pb			TR	100						+	+	+														
			TR	120						+	+	+														
1674	**tetrahydrofuran**		TR	20	-	-	0	0	0	0	+	+		-	+	+	+	-	-	-	-	-	+			
THF			TR	40		-	-			0	+	+			+	+	+						+			
oxolane			TR	60		-		-	-	0	+	+			+	+	+									
			TR	80		-					+	+														
C4H8O			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1675	**1,2,3,4-tetrahydronaphthalene**		TR	20	-		0	-	-	+	+	+		-				-	-	-	+	-				
Tetralin®			TR	40							+	+														
			TR	60							+	+														
			TR	80							+	+														
C10H12			TR	100							+	+														
1676	**thioglycolic acid**		TR	20	-		+	+	+		+	+						-		-						
mercaptoacetic acid			TR	40			+	+	+		+	+														
			TR	60			+	+	+		+	+														
HSCH2CO2H			TR	80							+	+														
C2H4O2S			TR	100							+	+														
1677	**thionyl chloride**		TR	20	-	-	-	-	-	+	+	+	-	-				-	-	-	-	-				
sulfurous acid dichloride			TR	40		-				+	+	+														
			TR	60		-				+	+	+														
SOCl2			TR	80		-					+	+														
Cl2OS			TR	100							+	+														
1678	**thiophene**		TR	20	-		0	0	0	+	+	+		0				-	-	-	-	-				
			TR	40			0	-	-		+	+														
			TR	60			-				+	+														
			TR	80							+	+														
C4H4S			TR	100							+	+														
1679	**toluene**		TR	20	-	-	0	0	0	+	+	+		-	+	+	+	-	-	-	+	-	+	+		+
methylbenzene			TR	40		-	0	-	-	+	+	+		-	+	+	+				0		+	+		+
			TR	60		-	-			0	+	+		-	+	+	+						+	+		+
C6H5CH3			TR	80		-				0	+	+		-	+	+	+						+	+		+
C7H8			TR	100						-	+	+		-	+	+	+						+	+		+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1681	**tributyl phosphate**		TR	20	-	-	+	+	+	+	+	+		-				-	+	-	-	-				
phosphoric acid tributyl ester			TR	40		-	+	+	+		+	+														
TBP			TR	60		-	+	+	+		+	+														
(C4H9O)3PO			TR	80		-					+	+														
C12H27O4P			TR	100							+	+														
1682	**trichloroacetaldehyde**		TR	20	-		+	+	+	-	+	+						0	-	-	0	-				
chloral			TR	40			+	+	+		+	+														
			TR	60			+	+	+		+	+														
CCl3CHO			TR	80							+	+														
C2HCl3O			TR	100							+	+														
1683	**trichlorobenzene (mixture of isomers)**		TR	20	-	-	-	-	-	-	+	+		-	+	+	+	-	-	-			+	+		+
			TR	40							+	+			+	+	+						+	+		+
			TR	60							+	+			+	+	+							+		+
			TR	80							+	+			+	+	+							+		+
C6H3Cl3			TR	100							+	+			+	+	+							+		+
1684	**trichloroacetic acid**	wä	50%	20	+		+	+	+	+	+	+		0			+	-	0	-	-	-	+			
		wä	50%	40	0		+	+	+	+	+	+					+						+			
		wä	50%	60			+	+		0	+	+					+						+			
CCl3CO2H		wä	50%	80						-	+	+					+						+			
C2HCl3O2		wä	50%	100							+	+														
1685	**trichloroethylene**		TR	20	-	-	-	0	0	+	+	+	-	-	+	+	+	-	-	-	0	-	+			
trichloroethene			TR	40		-				+	+	+	-										+			
			TR	60		-				+	+	+											+			
ClCH=CCl2			TR	80		-				+	+	+											+			
C2HCl3			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1686	**trichloronitromethane**		TR	20	+		-	-	-		+	+														
nitrotrichloromethane			TR	40							+	+														
chloropicrin			TR	60							+	+														
			TR	80							+	+														
CCl3NO2			TR	100							+	+														
1687	**triethanolamine**		TR	20	0		+	+	+	-	+	+				+		-	0	0	0	-	+			
2,2',2''-nitrilotriethanol			TR	40			+	+	+		+	+									-		+			
			TR	60			+	0	0		+	+														
(HOCH2CH2)3N			TR	80							+	+														
C6H15NO3			TR	100							+	+														
1688	**triethylene glycol**		TR	20			+	+	+		+	+														
triglycol			TR	40			+	+	+		+	+														
			TR	60			+	+	+		+	+														
HO(CH2CH2O)3H			TR	80							+	+														
C6H14O4			TR	100							+	+														
1689	**trimethyl borate**		TR	20	-		+	0	0		+	+														
boric acid trimethyl ester			TR	40			0	-	-		+	+														
			TR	60							+	+														
(CH3O)3B			TR	80							+	+														
C3H9BO3			TR	100							+	+														
1690	**trioctyl phosphate**		TR	20	-		0	+	+		+	+		-				0	-	-	-	-				
phosphoric acid trioctyl ester			TR	40							+	+														
			TR	60							+	+														
(C8H17O)3PO			TR	80							+	+														
C24H51O4P			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1692	**urine**			20	+		+	+	+	+	+	+		+				+	+	+	+	+				
				40	+		+	+	+	+	+	+						+	+	+	+	+				
				60	0		+	+	+	+	+	+						+	+	+	+	+				
				80						+	+	+														
				100						+	+	+														
				120							+	+														
1693	**vaseline**		TR	20	0		0	+	+	+	+	+		+	+	+	+	+	-	-	+	+				
			TR	40	-		0	0	0	+	+	+		+	+	+	+	+			+	+				
			TR	60			-	0	0	+	+	+						+			+	+				
			TR	80						+	+	+						+			+	+				
			TR	100						+	+	+						+			+	+				
			TR	120						+											+					
1694	**vaseline oil**		TR	20	+		+	+	+	+	+	+		+	+	+	+	+	-	+	+	0				
paraffin oil			TR	40	+		+	+	+	+	+	+		+	+	+	+	+		0	+	-				
			TR	60	0		+	0	0	+	+	+		+	+	+	+	0		-	+					
			TR	80						+	+	+		0	+	+	+									
			TR	100						+	+	+			+	+	+									
			TR	120						+	+	+			+	+	+									
1695	**vinyl acetate**		TR	20	-	-	+	+	+		+	+	-	-	+	+	+	+	+	+	+	+	+			
acetic acid vinyl ester			TR	40	-	-	+	0	0		+	+											+			
			TR	60	-	-	0				+	+														
CH3CO2CH=CH2			TR	80		-					+	+														
C4H6O2			TR	100							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1696	**vinyl chloride**	gf, tr	HK	20	-	-	0	-	-	+	+	+						-	-	-	0	-	+			
chloroethylene		gf, tr	HK	40			-			+	+	+									0		+			
		gf, tr	HK	60						+	+	+									0					
H2C=CHCl		gf, tr	HK	80						+	+	+														
C2H3Cl		gf, tr	HK	100						+	+	+														
1697	**viscose spinning solutions**			20	+		+	+	+	+	+	+		-				-	+	0	+	+				
				40	+		+	+	+	+	+	+							+	0	+	+				
				60	+		+	+	+	+	+	+							+	-	+	+				
				80							+	+														
				100							+	+														
1698	**1-tetracosanol**		TR	20	+		0	0	0	+	+	+		-				+	-	+	+	-				
wax alcohol			TR	40	+		0	0	0	+	+	+						+		+	+	-				
lignoceryl alcohol			TR	60	+		-	-	-	+	+	+						+		+	+	-				
CH3(CH2)22CH2OH			TR	80							+	+														
C24H50O			TR	100							+	+														
1702	**water, condensed**			20	+	+	+	+	+	+	+	+	+					+	+	+	+	+	+			
condensed water				40	+	+	+	+	+	+	+	+	+					+	+	+	+	+	+			
				60	0	+	+	+	+	+	+	+	+					+	0	+	+	+	+			
				80		+				+	+	+	-					0			+	+	+			
H2O				100						+	+	+											+			
1703	**water, seawater**			20	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
seawater				40	+	+	+	+	+	+	+	+	+	+	0	0	+	+	+	+	+	+	+	+	+	+
				60	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+
				80		+		+	+	+	+	+	-				+		+	0	+		+	+	+	+
				100						+	+	+					+			-			+	+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1704	**water, mineral water**			20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
mineral water				40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
				60	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
				80		+		+	+	+	+	+	-				+		+		+		+	+	+	+
				100						+	+	+					+						+	+	+	+
1705	**water, pure**			20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
pure water				40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
				60	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+		+	+	+	+
				80		+		+	+	+	+	+	-				+		0		+		+	+	+	+
H2O				100						+	+	+					+		-		+		+	+	+	+
1706	**water, traces of butanol and phenol**			20	+		+	+	+	+	+	+	+					+	+	+	+	+	+			
				40	-					+	+	+	+					+	+	+	+	+	+			
				60						+	+	+	+					+	0	+	+	0	+			
				80						+	+	+	-					-			+		+			
				100						+	+	+											+			
1708	**hydrogen**	gf, tr	HK	20	+		+	+	+	+	+	+		+		+	+	+	+	+	+	+				
		gf, tr	HK	40	+		+	+	+	+	+	+		+		+	+	+	+	+	+	+				
		gf, tr	HK	60	+		+	+	+	+	+	+				+		+	+	+	+	+				
		gf, tr	HK	80				0	0	+	+	+				+		+	+	+	+	+				
H2		gf, tr	HK	100				-	-	+	+	+				+		+	+		+					
		gf, tr	HK	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1709	**hydrogen peroxide**	wä	10%	20	+	+	+	+		+	+	+		+				0		-	+	+	+	+		+
hydrogen superoxide		wä	10%	40	+		+	+		+	+	+						-			+	+	+	+		+
		wä	10%	60	0		+	+		+	+	+									+	0	+	+		+
HOOH		wä	10%	80						+	+	+										-	+	+		+
H2O2		wä	10%	100						+	+	+											+	+		+
		wä	30%	20	+	+	+	+		+	+	+		+				-		-	+	+	+	+		+
		wä	30%	40	0		0	0		+	+	+									+	0	+	+		+
		wä	30%	60				0		+	+	+									0	-	+	+		+
		wä	30%	80						+	+	+									-		+	+		+
		wä	30%	100						+	+	+											+	+		+
		wä	50%	20						+	+	+									+		+	+		+
		wä	50%	40						+	+	+											+	+		+
		wä	50%	60							+	+														
		wä	50%	80							+	+														
		wä	50%	100							+	+														
		wä	90%	20			-	-	-	+	+	+						-		-	0	0				
		wä	90%	40							+	+														
		wä	90%	60							+	+														
		wä	90%	80							+	+														
		wä	90%	100							+	+														
1710	**wine, red and white**			20	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+				
				40			+	+	+	+	+	+		+	+	+	+									
				60			+	+	+	+	+	+			+	+	+									
				80						+	+	+														
				100						+	+	+														
				120						+	+	+														

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Stübbe
Partner for Solutions

Chemical Resistance

Release Date: 2016-07-01

		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1711	**brandy**			20	+		+	+	+	+	+	+		-	+	+	+	+	+	+	+	+				
				40	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+				
				60	+		+	+	+	+	+	+			+	+	+	+	+	+	+	+				
				80						+	+	+							+	0	0					
				100						+	+	+														
				120							+	+														
1712	**wine vinegar**		H	20	+		+	+	+	+	+	+	-	+	+	+	+	-	+	0	0	+				
			H	40	+		+	+	+	+	+	+		+	+	+	+		0	0	-	0				
			H	60	+		+	+	+	+	+	+		+	+	+	+		-	-		-				
			H	80				+	+	+	+	+		0	+	+	+									
			H	100				-	-	+	+	+			+	+	+									
1713	**L(+)-tartaric acid**	wä	GL	20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+				
tartaric acid, naturally		wä	GL	40	+		+	+	+	+	+	+	0		+	+	+	+	0	+	+	+				
		wä	GL	60	0		+	+	+	+	+	+	0		+	+	+	0	-	+	+	+				
HO2CCH(OH)CH(OH)CO2H		wä	GL	80						+	+	+														
C4H6O6		wä	GL	100						+	+	+														
1715	**xylene (mixture of isomers)**		TR	20	-	-	-	0	0	+	+	+		-	+	+	+	-	-	-	+	-	+	+	+	+
dimethylbenzene (mixture of isomers)			TR	40	-	-	-	-	-	+	+	+			+	+	+				0	-	+	+	+	+
			TR	60	-	-	-	-	-	0	+	+			+	+	+				-	-	+	+	+	+
C6H4(CH3)2			TR	80		-	-	-	-	0	+	+			+	+	+				-	-	+	+	+	+
C8H10			TR	100						0	+	+			+	+	+						+	+	+	+
			TR	120						-	+	+			+	+	+							+	+	+

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1716	**zinc carbonate basic**	wä	GL	20	+	+	+	+	+	+	+	+						+	+	+	+	+				+
zinc hydroxide carbonate		wä	GL	40	+	+	+	+	+	+	+	+						0	+	+	+	+				+
		wä	GL	60	+	+	+	+		+	+	+						-	+	+	+	+				+
2ZnCO3 • 3Zn(OH)2		wä	GL	80		+				+	+	+														
C2H6O12Zn5		wä	GL	100						+	+	+														
1717	**zinc chloride**	wä	10%	20	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		wä	10%	40	+	+	+	+	+	+	+	+		+				0	+	+	+	+				
		wä	10%	60	0	+	+	+	+	+	+	+						-	+	+	+	+				
ZnCl2		wä	10%	80		+				+	+	+														
Cl2Zn		wä	10%	100						+	+	+														
		wä	50%	20	+	+	+	+	+	+	+	+						+	+	+	+	+				
		wä	50%	40	+	+	+	+	+	+	+	+						0	+	+	+	+				
		wä	50%	60	0	+		+	+	+	+	+						-	+	+	+	+				
		wä	50%	80		+				+	+	+														
		wä	50%	100						+	+	+														
		wä	GL	20	+	+	+	+	+	+	+	+		+				+	+	+	+	+				
		wä	GL	40	+	+	+	+	+	+	+	+		+				0	+	+	+	+				
		wä	GL	60	+	+	+	+	+	+	+	+		+				-	+	+	+	+				
		wä	GL	80	-	+	0			+	+	+														
		wä	GL	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1718	**zinc nitrate**	wä	50%	20		+	+	+	+	+	+	+						+	+	+	+	+				
		wä	50%	40		+	+			+	+	+						0	+	+	+	+				
		wä	50%	60		+	+	+	+	+	+	+						-	+	+	+	+				
Zn(NO3)2		wä	50%	80		+				+	+	+														
N2O6Zn		wä	50%	100						+	+	+														
		wä	GL	20		+	+			+	+	+						+	+	+	+	+				
		wä	GL	40		+	+			+	+	+						0	+	+	+	+				
		wä	GL	60		+	+			+	+	+						-	+	+	+	+				
		wä	GL	80		+				+	+	+														
		wä	GL	100						+	+	+														
			TR	20		+				+	+	+						+	+	+	+	+				
			TR	40		+				+	+	+						0	+	+	+	+				
			TR	60		+				+	+	+						-	+	+	+	+				
			TR	80		+				+	+	+														
			TR	100						+	+	+														
			TR	120						+	+	+														
1719	**zinc hydrogenphosphate**	wä	GL	20			+	+	+	+	+	+						+	+	+	+	+				
		wä	GL	40			+	+	+	+	+	+						0	+	+	+	+				
		wä	GL	60			+	+	+	+	+	+						-	+	+	+	+				
ZnHPO4		wä	GL	80						+	+	+														
HO4PZn		wä	GL	100						+	+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1720	**zinc sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+		+	+	+	+	-	+	+	+	+	+	+	+	+
ZnSO4		wä	10%	80		+		+	+	+	+	+			+	+	+		+		+		+	+	+	+
O4SZn		wä	10%	100						+	+	+			+	+	+						+	+	+	+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+		+	+	+	+	-	+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+			+	+	+		+		+		+	+	+	+
		wä	GL	100						+	+	+			+	+	+						+	+	+	+
1721	**tin(II) chloride**	wä	VL	20	+	+	+	+	+	+	+	+			0	0	+	+	+	+	+	+				
		wä	VL	40	+	+	+	+	+	+	+	+		+	-	-	+	0	0	+	+	+				
		wä	VL	60	0	+	+	+	+	+	+	+		+												
SnCl2		wä	VL	80							+	+														
Cl2Sn		wä	VL	100		+					+	+														
		wä	GL	20	+	+	+	+	+	+	+	+			-	-	+	+	+	+	+	+				
		wä	GL	40	0	+	+	+	+	+	+	+			-	-	+	+	0	+	+	+				
		wä	GL	60	0	+	+	+	+	+	+	+		+	-	-	+	0	-	+	+	+				
		wä	GL	80		+	0	0	0	+	+	+		+			+		-							
		wä	GL	100						+	+	+														
			TR	20	+	+	+	+	+	+	+	+			-	-	+	+	+	+	+	+				
			TR	40	+	+	+	+	+	+	+	+					+	+	0	+	+	+				
			TR	60		+	+	+	+	+	+	+					+									
			TR	80		+				+	+	+														
			TR	100						+	+	+														
			TR	120							+	+														

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1722	**sugar sirup**			20	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+				
				40	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+				
				60	0	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+				
				80		+		+	+	+	+	+	+	+					+	+	+	+				
				100						+	+	+														
				120							+	+														
1723	**mixed acid: HNO3 12%, HF 5%**	wä		20					-	+	+	+	-		-	-	-						+	+		-
		wä		40						+	+	+											+	+		
		wä		60						+	+	+												+		
HNO3 12%, HF 5%, H2O 83%		wä		80						+	+	+									-			+		
		wä		100							+	+												+		
1724	**mixed acid: HNO3 20%, HF 5%**	wä		20					-	+	+	+	-		-	-	-						+	+		-
		wä		40						+	+	+											+	+		
		wä		60						+	+	+												+		
HNO3 20%, HF 5%, H2O 75%		wä		80						+	+	+									-			+		
		wä		100							+	+												+		

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
1763	**ammonium iron(III) sulfate**	wä	10%	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	10%	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	10%	60	0	+	+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
NH4Fe(SO4)2		wä	10%	80		+		+	+	+	+	+					+		+		+		+	+		+
H4FeNO8S2		wä	10%	100						+	+	+					+						+	+		+
		wä	GL	20	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	40	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+
		wä	GL	60	0	+	+	+	+	+	+	+					+		+	+	+	+	+	+	+	+
		wä	GL	80		+		+	+	+	+	+					+		+		+		+	+		+
		wä	GL	100						+	+	+					+						+	+		+
1955	**N,N-dimethylacetamide**		TR	20	-	-	-	-	-	-	+	+	-	-	+	+	+							+		+
			TR	40							+	+			+	+	+							+		+
			TR	60							+	+			+	+	+							+		+
CH3CON(CH3)2			TR	80							+	+			+	+	+							+		
C4H9NO			TR	100							+	+			+	+	+							+		
			TR	120							+	+			+	+	+							+		
2143	**ethylene glycol monobutyl ether**	tr	TR	20	-	-					+	+			+	+	+									
2-butoxyethanol		tr	TR	40							+	+			+	+	+									
butyl Cellosolve		tr	TR	60							+	+			+	+	+									
CH3(CH2)3OCH2CH2OH		tr	TR	80							+	+			+	+	+									
C6H14O2		tr	TR	100							+	+			+	+	+									

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		Condition	Concentration	Temperature [°C]	PVC-U	PVC-C	PE	PP	PP-GF30	PVDF	PTFE	FEP, PFA	PA12	PSU	V2A 1,4301	V4A 1,4571	Hast-C 2,4537	NBR	EPDM	CR	FKM = FPM	CSM	FFKM	SSIC	Carbon	Al2O3
2260	**ethylene glycol monomethyl ether**		TR	20							+	+		-	+	+	+		+		-		+	+		+
2-methoxyethanol			TR	40							+	+			+	+	+		+				+	+		+
methyl Cellosolve			TR	60							+	+			+	+	+						+	+		+
CH3OCH2CH2OH			TR	80							+	+			+	+	+							+		+
C3H8O2			TR	100							+	+			+	+	+							+		+
2776	**argon**	gf	HK	20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	60	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
		gf	HK	80		+		+	+	+	+	+		+	+	+	+	+	+		+	+	+			
Ar		gf	HK	100						+	+	+		+	+	+	+		+		+		+			
		gf	HK	120						+	+	+			+	+	+				+		+			

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