

Chemical Resistance Chart

This data listed in the following chart are based on information provided from different raw material manufacturers. The values are exclusively based on laboratory tests with the corresponding materials. The plastic components made from the different material are often subject to influences that cannot be uncovered in laboratory tests (pressure, temperature, material stress, effects of chemical agents, design characteristics etc).

Therefore, the specified values are to be regarded as guideline values only!!

In cases of doubt, we absolutely recommend to carry out an own test. This information does not entitle for any legal claim, we definitely do neither take over any warranty nor liability.

Chemical and mechanical resistance alone is not sufficient for the assessment of the usability of a product. In particular, the regulations pertaining to combustible liquids (explosion protection), for example, have to be taken into consideration.

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<p>+</p> <p>Excellent chemical resistance</p> <p>Continuous exposure to the substance does not cause any damage to the plastic within 30 days. The plastic may remain resistant for years.</p>	<p>○</p> <p>Good to limited chemical resistance</p> <p>Continuous exposure to the substance causes minor damages, some of which is reversible, within 7-30 days (e.g. swelling, softening, decrease of mechanical strength, discolouration).</p>	<p>-</p> <p>Poor chemical resistance</p> <p>Not suitable for continuous exposure to the substance. Immediate(!) damage may occur (e.g. loss of mechanical strength, deformation, discolouration, cracking, dissolution).</p>
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Hazard notes

E	Explosive	T+	Very toxic
O	Oxidizing	C	Corrosive
F	Highly flammable	Xn	Harmful
F+	Extremely flammable	Xi	Irritant
T	Toxic	N	Dangerous for the environment

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Acetaldehyde	40 %	F+, Xn	x	0	-	+	0	+	+	+	+	+	+	-	-
Acetaldehyde	technically pure	F+, Xn	x	0	-	+	0	+	+	+	+	+	+	-	-
Acetamide	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Acetone		F, T	x	+	0	+	0	+	+	+	+	+	+	0	-
Acetic acid	50 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Acetic acid	100 %	C+	x	+	0	+	+	+	+	+	+	+	+	+	+
Acetic acid	90 %	C+	x	+	+	+	+	+	+	+	+	+	+	+	+
Acetic acid	10 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Acetic acid	5 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Acetic anhydride	technically pure	C	x	+	0	+	+	+	+	+	+	+	+	-	-
Acetonitrile		F, T	x	0	-	+	+	+	+	+	+	+	+	+	+
Acetophenone		Xn		+	0	+	+	+	+	+	+	+	+	+	0
Acetyl chloride	100 %	F, C	x	0	-	+	+	+	+	+	+	+	+	+	+
Acetylene	100 %	F+	x	+	+	+	+	+	+	+	+	+	+	+	+
Acetylsalicylic acid	100 %	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Acrylonitrile		F, T	x	0	-	+	+	+	+	+	+	+	+	0	0
Adipic acid	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Aircraft engine fuels (JP)		Xn		+	-	+	+	+	+	+	+	+	+	+	+
Alanine				+	+	+	+	+	+	+	+	+	+	+	+
Allyl acetate	100 %	F, T	x	+	0	+	+	+	+	+	+	+	+	+	+
Allyl alcohol	96 %	F, T	x	+	+	+	+	+	+	+	+	+	+	+	+
Allyl chloride	100 %	F, T+	x	-	-	+	+	+	+	+	+	+	+	+	+
Allyl mustard oil		T	x	+	+	+	+	+	+	+	+	+	+	+	+
Almond oil				+	+	+	+	+	+	+	+	+	+	+	+
Aluminium acetate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium (hydroxide) acetate	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium aluminium sulphate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium chloride	solid	C		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium chloride	10 %			+	+	+	+	+	+	+	+	+	+	+	+
Aluminium chloride	saturated	C		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium fluoride	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium hydroxide		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium nitrate	hydrous	O		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium oxide	solid			+	+	+	+	+	+	+	+	+	+	+	+

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Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Aluminium sulphate	saturated	Xn		+	+			+	+	+	+	+	+	+	+
Aluminium sulphate	10%			+	+			+	+	+	+	+	+	+	+
Aminoacetic acid	10 %			+	+	+	+	+	+	+	+	+	+	+	+
Ammonium acetate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium carbonate	50 %	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium carbonate	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium chloride	solid	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium chloride	hydrous	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydrogen phosphate	any	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium iron (II) sulphate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium iron (III) sulphate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium fluoride	saturated	T, C		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium fluoride	hydrous	T, C		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium glycolate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium heptamolybdate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium bicarbonate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydrogendifluoride	50 %	T, C		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydrosulphide	any	T, C		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydroxide	30 %	C, N		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydroxide	5 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium hydroxide		C/Xi, N		+	+	+	+	+	+	+	+	+	+	+	0
Ammonium metaphosphate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium nitrate	10 %	O		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium nitrate	saturated	O		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium oxalate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium peroxodisulphate		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium peroxodisulphate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium sulphate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium sulphate	10 %	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium sulfide	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ammonium sulfide	any	T, C	x	+	+	+	+	+	+	+	+	+	+	+	+
Ammonium sulfide	hydrous	T, C	x	+	+	+	+	+	+	+	+	+	+	+	+
Ammonium thiocyanate		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Amyl acetate, n-			x	0	-	+	+	+	+	+	+	+	+	+	0

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Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Amyl alcohol, n-		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Amyl chloride		F, Xn	x	-	-	+	+	+	+	+	+	+	+	+	+
Amyl cinnamic aldehyde		Xi		0	0	+	+	+	+	+	+	+	+	+	+
Aniline		T		+	-	+	-	+	+	+	+	+	+	+	-
Anilin chlorohydrate	saturated	T		+	-	+	+	+	+	+	+	+	+	+	+
Anise				+	+	+	+	+	+	+	+	+	+	+	+
Anisole	100 %	Xi	x	0	-	+	+	+	+	+	+	+	+	+	0
Anis oil		Xi		0	-	+	+	+	+	+	+	+	+	+	0
Anti-freeze agent (car)		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Antimony pentachloride		C		+	+	+	+	+	+	+	+	+	+	+	+
Antimony trichloride	anhydrous	C		+	+	+	+	+	+	+	+	+	+	+	+
Antimony trichloride	90 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Antimony trichloride	hydrous	C		+	+	+	+	+	+	+	+	+	+	+	+
Apple juice				+	+	+	+	+	+	+	+	+	+	+	+
Aqua regia		C		-	-	+	+	+	+	+	+	+	+	+	0
Arsenic pentoxide		T, N		+	+	+	+	+	+	+	+	+	+	+	+
Arsenic acid	hydrous	T, N		+	+	+	+	+	+	+	+	+	+	+	+
Arsenic acid		T, N		+	+	+	+	+	+	+	+	+	+	+	+
Ascorbic acid	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Atropine sulphate		T+		+	+	+	+	+	+	+	+	+	+	+	+
Barium bromide		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Barium carbonate	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Barium chloride	saturated	T		+	+	+	+	+	+	+	+	+	+	+	+
Barium chloride	hydrous	T		+	+	+	+	+	+	+	+	+	+	+	+
Barium hydroxide	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Barium hydroxide	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Barium sulfide	saturated	T		+	+	+	+	+	+	+	+	+	+	+	+
Battery acid	38 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Beef tallow				+	+	+	+	+	+	+	+	+	+	+	+
Beef tallow emulsion	sulphurized			+	+	+	+	+	+	+	+	+	+	+	+
Beer				+	+	+	+	+	+	+	+	+	+	+	+
Beeswax				+	0	+	+	+	+	+	+	+	+	+	+
Benzaldehyde		Xn		+	-	+	0	+	+	+	+	+	+	+	+
Benzene		F, T	x	0	-	+	+	+	+	+	+	+	+	+	0

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Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Benzenesulphonic acid	saturated	C		+	-			+	+	+	+	+	+	+	-
Benzoic acid	saturated	Xn, Xi		+	0	+	+	+	+	+	+	+	+	+	+
Benzoic acid	hydrous	Xn, Xi		+	0	+	+	+	+	+	+	+	+	+	+
Benzoyl chloride	100 %	C		0	-					+	+	+	+	+	+
Benzyl acetate		Xn/Xi		+	+	+	+	+	+	+	+	+	+	0	0
Benzyl alcohol		Xn		-	-	+	+	+	+	+	+	+	+	+	+
Benzyl benzoate		Xn		0	0					+	+	+	+	+	+
Benzyl chloride	100 %	T/Xi		-	-			+	+	+	+	+	+	0	0
Bismuth chloride		Xi		+	+			+	+	+	+	+	+	+	+
Bismuth subnitrate		O, Xi		+	+			+	+	+	+	+	+	+	+
Bisulfite solution		Xn		+	+			+	+	+	+	+	+	+	+
Bisulfite solution, containing SO ₂	saturated	Xn		+	+			+	+	+	+	+	+	+	+
Bitter almond oil		Xn		+	-	+	0	+	+	+	+	+	+	+	+
Bitter orange oil				+	0	+	+	+	+	+	+	+	+	+	+
Bitumen				+	0			+	+	+	+	+	+	+	+
Bone oil				+				+	+	+	+	+	+	+	+
Boric acid	10%	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Boric acid	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Brake fluid				+	+			+	+	+	+	+	+	0	0
Brine	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Bromine		T+, C		-	-	+	+	+	+	+	0	+	+	+	+
Bromobenzene		Xn	x	-	-	+	-	+	+	+	+	+	+	+	+
Bromochloromethane	100 %	Xn		-	-			+	+	+	+	+	+	0	0
Bromine vapours		T		-	-			+	+	+	+	+	+	+	+
Bromomethane	technically pure	T		-	-			+	+	+	+	+	+	+	+
Bromoform		T		-	-	+	0	+	+	+	+	+	+	+	+
Bromine pentafluoride		F, T, C		0	0			+	+	+	+	+	+	0	0
Bromic acid	concentrated	C		0	0			+	+	+	+	+	+	+	+
Bromine trifluoride		T, C		0	0			+	+	+	+	+	+	0	0
Bromotrifluoromethane		N		0	0			+	+	+	+	+	+	+	+
Bromine water	saturated	T		-	-			+	+	+	+	+	+	+	+
Butadiene, 1,3-		F+, T	x	-	-	+	+	+	+	+	+	+	+	+	+
Butane	technically pure	F+	x	+	+			+	+	+	+	+	+	+	+
Butanol	technically pure	Xn	x	+	+	+	+	+	+	+	+	+	+	+	+

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Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Butanetriol	100 %			+	+			+	+	+	+	+	+	+	
Butene	technically pure	F+	x	-	-			+	+	+	+	+	+	+	+
Butter				+	+			+	+	+	+	+	+	+	+
Butyric acid		C		-	-	+	+	+	+	+	+	+	+	+	0
Butyl acetate	100 %		x	0	-	+	+	+	+	+	+	+	+	+	-
Butyl acrylate	100 %	Xi	x	0	-	+	+	+	+	+	+	+	+	+	+
Butyl alcohol, secondary		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Butyl alcohol, tertiary		F, Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Butylamine		F, C	x	+	+	+	+	+	+	+	+	+	+	+	+
Butylene glycol	technically pure			+	+	+	+	+	+	+	+	+	+	+	+
Butylene glycol	100 %	Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Butylphenol	100 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Butylphenol, p-tertiary	technically pure	C, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Butyl stearate	100 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Butyraldehyde		F, Xn	x	+	+	+	+	+	+	+	+	+	+	+	0
Cadmium bromide		T		+	+	+	+	+	+	+	+	+	+	+	+
Caesium bromide		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Calcium acetate	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Calcium bicarbonate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Calcium bisulfite	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Calcium bisulfite	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Calcium bromide				+	+	+	+	+	+	+	+	+	+	+	+
Calcium carbide		F	x	+	+	+	+	+	+	+	+	+	+	+	+
Calcium carbonate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Calcium chlorate	saturated	O, T		+	+	+	+	+	+	+	+	+	+	+	+
Calcium chloride	alcoholic	F, Xi		+	+	+	+	+	+	+	+	+	+	+	+
Calcium chloride	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Calcium hydroxide	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Calcium hydroxide	concentrated	C		+	+	+	+	+	+	+	+	+	+	+	0
Calcium hypochlorite	hydrous	O, C/Xi		+	+	+	+	+	+	+	+	+	+	+	+
Calcium hypochlorite	saturated	O,C		+	+	+	+	+	+	+	+	+	+	+	0
Calcium nitrate	50 %	O		+	+	+	+	+	+	+	+	+	+	+	+
Calcium nitrate	hydrous	O		+	+	+	+	+	+	+	+	+	+	+	+
Calcium oxide	Powder	C		+	+	+	+	+	+	+	+	+	+	+	+

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Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Calcium phosphate				+	+	+	+	+	+	+	+	+	+	+	+
Calcium phosphate	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Calcium sulphate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Calcium sulphide	hydrous	C		+	+	+	+	+	+	+	+	+	+	+	+
Calcium sulphide		C		+	+	+	+	+	+	+	+	+	+	+	+
Camphor		F, Xn	x	+	+	+	+	+	+	+	+	+	+	0	0
Camphor oil		Xn		-	-			+	+	+	+	+	+	0	0
Caraway	ground			+	+			+	+	+	+	+	+	+	+
Carbazole		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Carbolineum	hydrous	Xn		+	+			+	+	+	+	+	+	+	+
Carbolineum	100 %	T		+	0	+	+	+	+	+	+	+	+	+	+
Carbon disulfide		F+, T	x	-	-	+	0	+	+	+	+	+	+	+	+
Carbon dioxide	saturated			+	+			+	+	+	+	+	+	+	+
Carbon dioxide, damp	technically pure			+	+			+	+	+	+	+	+	+	+
Carbon dioxide, dry	technically pure			+	+			+	+	+	+	+	+	+	+
Carbon tetrabromide		Xn, Xi		0	-			+	+	+	+	+	+	+	+
Cardamom				+	+			+	+	+	+	+	+	+	+
Carnauba wax				+	+			+	+	+	+	+	+	+	+
Castor oil	100 %	Xi		+	+			+	+	+	+	+	+	+	+
Cedar oil				-	-	+	+	+	+	+	+	+	+	+	+
Cetyl alcohol	100 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Chalk				+	+	+	+	+	+	+	+	+	+	+	+
Chloroacetic acid	50 %	T, C		+	+			+	+	+	+	+	+	+	-
Chloroacetic acid		T, C		+	+			+	+	+	+	+	+	+	-
Chloral hydrate	technically pure	T/Xi		0	-			+	+	+	+	+	+	+	-
Chloramine-T	diluted	Xi		0	0			+	+	+	+	+	+	0	-
Chloric acid	20 %	O, C		+	-									+	+
Chloric acid	1 %	C		+	0									+	+
Chloric acid	10 %	O, C		-	-									+	+
Chlorinated lime	hydrous			+	+									+	+
Chlorinated lime		O, C		+	+									+	+
Chlorine	10 % wet	T		-	-	+	+	+	+	+	+	+	+	+	+
Chlorine	97 %	T		-	-			+	+	+	+	+	+	+	+
Chlorine dioxide		E, T		0	0									+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Chlorine gas		T		-	-			+	+	+	+	+	+	+	+
Chlorine trifluoride		O, T		-	-					+	+	+	+	-	-
Chlorine water		T		0	-		+	+	+	+	+	+	+	+	+
Chloroacetone		F, Xi	x	+	+					+	+	+	+	0	0
Chloroacetophenone, p-		Xh		+	+		+	+	+	+	+	+	+	+	+
Chlorobenzene		Xh	x	0	-		+	+	+	+	+	+	+	+	+
Chlorodifluoromethane		N, Xh		-	-			0	0	+	+	+	+	0	0
Chloroethane		F+, Xh	x	0	-		+	+	+	+	+	+	+	+	+
Chloroethanol	technically pure	T+		-	-			+	+	+	+	+	+	+	0
Chloroethylene	technically pure	F+, T	x	0	0			+	+	+	+	+	+	+	+
Chlorofluorocarbon (CFC)		N		0	0					+	+	+	+	+	0
Chlorofluoromethane		N		0	0					+	+	+	+	+	+
Chloromethane	technically pure	F+, T	x	-	-			+	+	+	+	+	+	+	+
Chloronaphthalene, 1-		Xh		-	-			+	+	+	+	+	+	+	+
Chloroform	100 %	Xh		0	-		+	+	+	+	+	+	+	+	+
Chloropentafluoroethane				0	0					+	+	+	+	+	+
Chloroprene		F, Xh	x	0	0			+	+	+	+	+	+	+	+
Chlorosulfonic acid	technically pure	C+		-	-					+	+	+	+	0	-
Chlorotoluene		Xh		0	0			+	+	+	+	+	+	+	+
Chlorotrifluoromethane				0	0					+	+	+	+	+	+
Chromium alum	saturated	Xh		+	+		+	+	+	+	+	+	+	+	+
Chromium salts	any	T/Xh		+	+			+	+	+	+	+	+	+	+
Chromic acid	10 %	O, T, C, N		+	+		+	+	+	+	+	+	+	+	+
Chromic acid	20 %	O, T, C, N		0	0			+	+	+	+	+	+	+	+
Chromic acid	50 %	O, T, C, N		0	0		+	+	+	+	+	+	+	+	+
Chromic-Sulphuric acid	concentrated	O, T, C, N		-	-		+	+	+	+	+	+	+	+	-
Cinnamon	ground			+	+			+	+	+	+	+	+	+	+
Cinnamaldehyde		Xh, Xi		0	0			+	+	+	+	+	+	+	+
Cinnamon oil		Xh, Xi		-	-		+	+	+	+	+	+	+	+	+
Citric acid	10 %	Xi		+	+		+	+	+	+	+	+	+	+	+
Citric acid	50 %	Xi		+	+			+	+	+	+	+	+	+	+
Citric acid	saturated	Xi		+	+			+	+	+	+	+	+	+	+
Citrus juices	hydrous			+	+			+	+	+	+	+	+	+	+
Cleaners	hydrous			+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEF		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Clophen A60		Xn, N		-	-					+	+	+	+	+	+
Clove	ground			+	+			+	+	+	+	+	+	+	+
Coal gas, without benzene		F+, T	x	+	+			+	+	+	+	+	+	+	+
Coal mine methane		F+	x	+	+			+	+	+	+	+	+	+	+
Cobalt(III) chloride	hydrous	Xh		+	+			+	+	+	+	+	+	+	+
Cocoa				+	+		+	+	+	+	+	+	+	+	+
Cocoa butter				+	+					+	+	+	+	+	+
Coconut fat				+	+			+	+	+	+	+	+	+	+
Coconut fatty alcohol	technically pure	Xi		+	0			+	+	+	+	+	+	+	+
Coconut oil	technically pure			+	+			+	+	+	+	+	+	+	+
Cod liver oil				+	0			+	+	+	+	+	+	+	+
Colza oil				+	0			+	+	+	+	+	+	+	+
Compressed air	oleaginous			0	0			+	+	+	+	+	+	+	+
Copper(II) chloride	hydrous	Xh		+	+			+	+	+	+	+	+	+	+
Copper(III) chloride	saturated	Xh		+	0			+	+	+	+	+	+	+	+
Copper(II) nitrate	saturated	0, Xh		+	+			+	+	+	+	+	+	+	+
Copper(III) nitrate	hydrous	0, Xh		+	+			+	+	+	+	+	+	+	+
Copper acetate	hydrous	Xh		+	+			+	+	+	+	+	+	+	+
Copper cyanide	saturated	T		+	0			+	+	+	+	+	+	+	+
Copper sulfate	hydrous	Xh		+	+		+	+	+	+	+	+	+	+	+
Corn oil	technically pure			+	0			+	+	+	+	+	+	+	+
Cottonseed oil	technically pure			+	+			+	+	+	+	+	+	+	+
Creosote		T		0	-			+	+	+	+	+	+	0	0
Cresol (-mixtures)		T, C		+	0		+	+	+	+	+	+	+	+	+
Crotonaldehyde	technically pure	F, T	x	+	+			+	+	+	+	+	+	+	0
Crude oil	100 %	N		+	0			+	+	+	+	+	+	+	+
Cumene		Xi	x	0	-		+	+	+	+	+	+	+	+	+
Curry				+	+			+	+	+	+	+	+	+	+
Cyclanon		Xh, Xi		+	+			+	+	+	+	+	+	+	+
Cyclohexan		F	x	0	-		+	+	+	+	+	+	+	+	+
Cyclohexanol	technically pure	Xh		+	0			+	+	+	+	+	+	+	0
Cyclohexanone	technically pure	Xh	x	+	-			+	+	+	+	+	+	+	0
Cymene, p-		F, Xh/Xi	x	0	0			+	+	+	+	+	+	+	+
DDT (Emulsion)		T		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Decahydronaphthalene		Xn		0	-	+	+	+	+	+	+	+	+	+	+
Decane		Xn	x	0	0	+	+	+	+	+	+	+	+	+	+
Dehydroacetic acid		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Densodrin W	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Desiccator fat				+	+	+	+	+	+	+	+	+	+	+	+
Desmodur 44		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Developer for photos				+	+	+	+	+	+	+	+	+	+	+	+
Developer liquids				+	+	+	+	+	+	+	+	+	+	+	+
Dextrin	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Diacetone alcohol		Xi	x	+	+	+	+	+	+	+	+	+	+	+	+
Dibenzyl ether		Xi		0	0	+	+	+	+	+	+	+	+	+	+
Dibenzyl sebacate				0	0	+	+	+	+	+	+	+	+	+	+
Dibutylamine		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Dibutyl ether	technically pure	Xi	x	0	-	+	+	+	+	+	+	+	+	+	+
Dibutyl phthalate	FR, 80 °C	T		+	+	+	+	+	+	+	+	+	+	+	+
Dibutyl phthalate		T		+	+	+	+	+	+	+	+	+	+	+	0
Dibutyl sebacate	technically pure			+	+	+	+	+	+	+	+	+	+	+	+
Dibromethane-1,2		T		-	-	+	+	+	+	+	+	+	+	+	+
Dibromotetrafluoromethane				0	0	+	+	+	+	+	+	+	+	+	+
Dichloroacetic acid	50 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Dichloroacetic acid	technically pure	C		+	0	+	+	+	+	+	+	+	+	+	+
Dichlorobenzene, 1,2-		Xn		0	-	+	0	+	+	+	+	+	+	+	+
Dichlorobenzene, 1,4-		Xn		0	-	+	+	+	+	+	+	+	+	+	+
Dichloro ethylene	technically pure	F+, Xn	x	0	0	+	+	+	+	+	+	+	+	+	+
Dichlorodifluoromethane	technically pure	N		-	-	+	+	0	0	+	+	+	+	0	-
Dichlorodifluoromethane		N		-	-	+	+	0	0	+	+	+	+	0	-
Dichlorofluoromethane	100 %	N		-	-	+	+	0	0	+	+	+	+	0	0
Dichlorohexafluorocyclobutane				0	0	+	+	+	+	+	+	+	+	+	+
Dichloroisopropyl ether		Xn		0	0	+	+	+	+	+	+	+	+	0	0
Dichloromethane		n		0	-	+	+	+	+	+	+	+	+	+	0
Dichloropropane	100 %	F, T/Xn	x	-	-	+	+	+	+	+	+	+	+	+	+
Dichlorotetrafluoroethane				0	0	+	+	+	+	+	+	+	+	+	+
Dicyclohexylamine (DCHA)		C, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Dicyclohexyl phthalate	technically pure	Xn		+	0	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Diesel fuel		Xn, N		+	0			+	+	+	+	+	+	+	+
Diesel oil	100 %	Xn		+	0			+	+	+	+	+	+	+	+
Diethanolamine (DEA)	100 %	Xi		+	+			+	+	+	+	+	+	+	0
Diethylamine	technically pure	F, C, Xn	x	+	+			+	+	+	+	+	+	+	-
Diethylbenzene		Xi		-	-			+	+	+	+	+	+	+	+
Diethylene glycol		T		+	+			+	+	+	+	+	+	+	+
Diethylene glycol ether		Xn		+	+			+	+	+	+	+	+	+	+
Diethyl ketone		F		+	+			+	+	+	+	+	+	+	0
Diethyl malonate		Xi		+	+			+	+	+	+	+	+	+	0
Diethyl sebacate		Xi		+	+			+	+	+	+	+	+	+	+
Diethyl succinate				+	+			+	+	+	+	+	+	+	+
Difluorochloroethane				0	0										
Difluoroethane		E, F+		0	0										
Difluoromethane				0	0										
Difluorotetrachloroethane				0	0										
Diglycolic acid	hydrous	Xn		+	+										
Diglycolic acid	30 %	Xn, Xi		+	+										
Diisobutylene (DIB)				+	+										
Diisobutylketon	technically pure	Xi	x	+	-										0
Diisooctylphthalat (DOP)	technically pure	Xn		-	-										+
Diisobutyl ketone		F	x	0	0										+
Diisopropyl ether	technically pure	F	x	-	-										0
Dimethylamine	technically pure	F+, Xn	x	+	0										0
Dimethylamine		T		-	-										+
Dimethyl ether	Gas	F+	x	-	-										0
Dimethylformamide (DMF)		T		+	+										-
Dimethylphthalate (DMP)	100 %	Xn		+	0										+
Dimethylsulfoxide (DMSO)		Xi		+	+										0
Dinonyl phthalate (DNP)	technically pure	Xn		+	0										+
Dioctyl adipate				-	-										+
Dioctyl sebacate				0	0										+
Dioxane		F, Xn	x	0	0										0
Diphenylamine		T		0	0										+
Diphenyl ether		Xn/Xi		-	-										+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Diphenyl				-	-			+	+	+	+	+	+	+	+
Dipropylene glycol		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Dipropylketon			X	0	0			+	+	+	+	+	+	+	+
Disodium phosphate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Dispersion of rubber				+	+			+	+	+	+	+	+	+	+
Emulsifiers				+	+			+	+	+	+	+	+	+	+
Ephetin	10% in water			+	+										
Epichlorohydrin	100 %	F, T	X	+	+			+	+	+	+	+	+	0	0
Ethanol	40 %		X	+	+	+	+	+	+	+	+	+	+	+	+
Ethanol	50 %		X	+	+			+	+	+	+	+	+	+	+
Ethanol	96 %	F	X	+	+			+	+	+	+	+	+	+	+
Ethanolamine		Xn/Xi		+	+			+	+	+	+	+	+	+	+
Ethanothiol		F, Xn	X	+	+			+	+	+	+	+	+	+	+
Ethyl acetate	100 %	F	X	+	0			+	+	+	+	+	+	+	0
Ethyl acetate			X	+	+			+	+	+	+	+	+	+	0
Ethyl acrylate	100 %	F, Xn	X	-	-			+	+	+	+	+	+	0	0
Ethyl alcohol		F	X	+	+			+	+	+	+	+	+	+	+
Ethyl benzene		F, Xn	X	0	-			+	+	0	+	+	+	+	+
Ethyl benzoate		Xh		+	0			+	+	+	+	+	+	+	0
Ethyl butyrate		F	X	+	-			+	+	+	+	+	+	+	+
Ethyl chloroacetat	technically pure	T/Xi		+	+			+	+	+	+	+	+	+	-
Ethyl cyanoacetate		Xn/Xi		+	+			+	+	+	+	+	+	0	0
Ethyl ether	technically pure	F+, Xn	X	-	-			+	+	+	+	+	+	+	-
Ethyl formate		F	X	+	+			+	+	+	+	+	+	0	0
Ethyl glycol	100 %	T	X	+	-			+	+	+	+	+	+	+	+
Ethylene		F+	X	+	+			+	+	+	+	+	+	+	+
Ethylene chloride		F, T	X	0	-			+	+	+	+	+	+	+	+
Ethylene diamine	technically pure	C, Xn	X	+	+			+	+	+	+	+	+	+	-
Ethylenediaminetetraacetic acid (EDTA)		Xi		+	+			+	+	+	+	+	+	+	+
Ethylene glycol		Xh		+	+			+	+	+	+	+	+	+	+
Ethylene glycol		T	X	+	+			+	+	+	+	+	+	+	+
Ethylene glycol monomethyl ether acetate		Xh	X	+	+			+	+	+	+	+	+	+	+
Ethylene oxide		F+, T	X	0	0			+	+	+	+	+	+	+	+
Ethylhexanol-1		Xn/Xi		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEF		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Eucalyptus oil				+	+			+	+	+	+	+	+	+	+
Exhaust gases, alkaline				+	+					+	+	+	+	+	-
Exhaust gases, containing carbon dioxide	low			+	+	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing hydrochloric acid	any			+	+	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing hydrogen fluoride	low			+	+	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing nitrous gases	low			+	0	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing sulphur dioxide	low			+	+	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing sulphuric acid	any			+	0	+	+	+	+	+	+	+	+	+	+
Exhaust gases, containing sulphur trioxide	low			-	-	+	+	+	+	+	+	+	+	+	+
Fat, edible oils				0	0			+	+	+	+	+	+	+	+
Fat, mineral				+	0			+	+	+	+	+	+	+	+
Fat, vegetable				+	0			+	+	+	+	+	+	+	+
Fatty alcohol sulfonates	hydrous	Xn, Xi		+	0			+	+	+	+	+	+	+	+
Fermentation mash				+	+	+	+	+	+	+	+	+	+	+	+
Fluid 101, 100 °C				0	0										
Fluorine		0, T+, C+		-	-	+	0	+	+	+	+	+	+	+	-
Fluoro benzene		F, Xn	x	0	0					+	+	+	+	+	+
Fluoride		T		+	+	+	+	+	+	+	+	+	+	+	+
Fluorocarbons				0	0	+	+			+	+	+	+	+	0
Formaldehyde solution	10 %	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Formaldehyde solution	30 %	T		+	+			+	+	+	+	+	+	+	+
Formaldehyde solution	40 %	T		+	+	+	+	+	+	+	+	+	+	+	+
Formamide	technically pure	T/Xi		+	+			+	+	+	+	+	+	+	0
Formic acid	98 - 100%	C		+	0	+	+	+	+	+	+	+	+	+	+
Formic acid	50 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Formic acid	3 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Fixing baths for photos				+	+	+	+	+	+	+	+	+	+	+	+
Fruit juices				+	+			+	+	+	+	+	+	+	+
Fruit pulp				+	+	+	+	+	+	+	+	+	+	+	+
Fruit wine				+	+	+	+	+	+	+	+	+	+	+	+
Fructose	any			+	+	+	+	+	+	+	+	+	+	+	+
Fuel +20% ethyl alcohol		F, T	x	0	0			+	+	+	+	+	+	+	+
Fuel +20% methyl alcohol		F, T	x	0	0			+	+	+	+	+	+	+	+
Fuel, normal		F, T	x	0	-			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Fuel, super		F, T	x	0	-			+	+	+	+	+	+	+	+
Furan		F+, T+	x	0	0			+	+	+	+	+	+	0	0
Gasoline		F, Xn	x	0	-			+	+	+	+	+	+	+	+
Furfural		T		-	-			+	+	+	+	+	+	+	+
Furfuryl alcohol	technically pure	Xh		+	0			+	+	+	+	+	+	+	0
Gallic acid		Xi		+	+			+	+	+	+	+	+	+	-
Gas liquor				+	+			+	+	+	+	+	+	+	+
Gas oil		Xh		+	0			+	+	+	+	+	+	+	+
Gearbox oil, EP (Hypoid), 110 °C				0	0					+	+	+	+		
Gelatin	any			+	+		+	+	+	+	+	+	+	+	+
Genantın		Xh		+	+					+	+	+	+	+	+
Ginger	ground			+	+			+	+	+	+	+	+	+	+
Glue (bone glue)	any			+	+			+	+	+	+	+	+	+	+
Glucose	any			+	+			+	+	+	+	+	+	+	+
Glycerine	any	Xi		+	+			+	+	+	+	+	+	+	+
Glycolic acid	70 %	C, Xi		+	+			+	+	+	+	+	+	+	+
Glycolic acid	37 %	Xn		+	+			+	+	+	+	+	+	+	0
Glysantin		Xh		+	+			+	+	+	+	+	+	+	+
HD-Oil, Motor oil, without aromatics				+	0			+	+	+	+	+	+	+	+
Heating oil		Xn		+	0			+	+	+	+	+	+	+	+
Helium				+				+	+	+	+	+	+	+	+
Henkel-P3-solution				+	+			+	+	+	+	+	+	+	+
Heptane, n-		F, Xn	x	+	-			+	+	+	+	+	+	+	+
Heptanol, 1-		Xh		+	+			+	+	+	+	+	+	+	+
Heptanone		Xn	x	0	0			+	+	+	+	+	+	+	+
Hexachlorobenzene (HCB)		T		0	0			+	+	+	+	+	+	+	+
Hexachlorobutadiene (HCBd)		T		0	0			+	+	+	+	+	+	+	0
Hexachlorocyclohexane (HCH)		T		0	0			+	+	+	+	+	+	+	+
Hexafluorosilicic acid		C		+	+		+	+	+	+	+	+	+	+	+
Hexamethylenetetramine	32 %	F, Xn	x	+	+			+	+	+	+	+	+	+	+
Hexane, n-		F, Xn	x	+	0			+	+	+	+	+	+	+	+
Hexanal		F, Xi	x	+	+			+	+	+	+	+	+	+	+
Hexanol, (1-)		Xn		+	+			+	+	+	+	+	+	+	+
Hexantriol	100 %			+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Hexene, 1-		F, Xn	x	0	0			+	+	+	+	+	+	+	+
Honey				+	+	+	+	+	+	+	+	+	+	+	+
Hydraulic fluids, HFA	50 °C			0	0										
Hydraulic fluids, HFB	50 °C			0	0										
Hydraulic fluids, HFC	60 °C			0	0										
Hydraulic fluids, HFD-R	100 °C			0	0										
Hydraulic fluids, HFD-S	100 °C			0	0										
Hydraulic oils (based on mineral oil)															
Hydrazine	10 %	T	x	-	-			+	+	+	+	+	+	+	0
Hydrazine hydrate	hydrous	T, C	x	-	-			+	+	+	+	+	+	+	0
Hydrobromic acid	40 %	C		+	+			+	+	+	+	+	+	+	+
Hydrobromic acid	50 %	C		+	+			+	+	+	+	+	+	+	+
Hydrobromic acid	diluted	C		+	+			+	+	+	+	+	+	+	+
Hydrochloric acid	1-5 %			+	+			+	+	+	+	+	+	+	+
Hydrochloric acid	35 %	C		+	+			+	+	+	+	+	+	+	+
Hydrochloric acid	concentrated	C		+	+			+	+	+	+	+	+	+	+
Hydrochloric acid	20 %	Xi		+	+			+	+	+	+	+	+	+	+
Hydrofluoric acid	100 %	T+, C+		+	+			+	+	+	+	+	+	+	+
Hydrofluoric acid	4 %	T, C		+	+			+	+	+	+	+	+	+	+
Hydrofluoric acid	50 %	T+, C		+	+			+	+	+	+	+	+	+	+
Hydrofluoric acid	70 %	T+, C		+	0			+	+	+	+	+	+	+	+
Hydrogen	technically pure	F+	x	+	+			+	+	+	+	+	+	+	+
Hydrogen fluoride	anhydrous	T+, C+		+	+			+	+	+	+	+	+	+	+
Hydrogen peroxide	100 %	O, C		-	-			+	+	+	+	+	+	+	+
Hydrogen peroxide	90 %	O, C		+	+			+	+	+	+	+	+	+	+
Hydrogen peroxide	30 %	C		+	0			+	+	+	+	+	+	+	+
Hydrogen peroxide	3 %	Xi		+	+			+	+	+	+	+	+	+	+
Hydrogen chloride gas	anhydrous	T, C		+	+			+	+	+	+	+	+	+	+
Hydrogen cyanide	technically pure	F+, T+	x	+	+			+	+	+	+	+	+	+	+
Hydrogen cyanide	hydrous	F+, T+	x	+	+			+	+	+	+	+	+	+	+
Hydrogen sulphide	saturated	F+, T+	x	+	+			+	+	+	+	+	+	+	+
Hydroquinone	saturated	Xn		-	-			+	+	+	+	+	+	+	0
Hydroxylammonium sulphate	12 %	Xn						+	+	+	+	+	+	+	+
Hydroxylammonium sulphate	any	Xn						+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Hydroxymethyl furfural, 5-		Xi		+	+			+	+	+	+	+	+	0	0
Iron-(II)-chloride	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iodine pentafluoride		T, C		-	-									0	0
Iodine tincture		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Iron nitrate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron nitrate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron-(II)-sulfate	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron-(II)-sulfate	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron-(III)-sulfate		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron-(III)-chloride	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Iron-(III)-sulfate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Isoamyl alcohol		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Isobutanol		Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Isobutyl acetate		F	x	+	+	+	+	+	+	+	+	+	+	+	+
Isooctane	technically pure	F, Xn	x	+	+	+	+	+	+	+	+	+	+	+	+
Isopropanol	technically pure	F	x	+	+	+	+	+	+	+	+	+	+	+	+
Isopropyl acetate		F, Xi	x	+	+	+	+	+	+	+	+	+	+	0	0
Isopropyl chloride		F, Xi	x	+	+	+	+	+	+	+	+	+	+	+	+
Isopropyl methyl ketone		F	x	+	+	+	+	+	+	+	+	+	+	0	0
Jodoform	100 %	Xn		0	0			+	+	+	+	+	+	+	+
Kerosine		Xn		0	0			+	+	+	+	+	+	+	+
Lactam				+	+										
Lactic acid	3 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Lactic acid	80 %	C		+	+	+	+	+	+	+	+	+	+	+	0
Lactic acid	85 %	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Lactose	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Lanolin	technically pure			0	0			+	+	+	+	+	+	+	+
Lard				+	+			+	+	+	+	+	+	+	+
Latex				+	+			+	+	+	+	+	+	+	+
Laurel	ground			+	+			+	+	+	+	+	+	+	+
Lauryl alcohol	100 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Lauryl chloride	100 %	Xi		0	0			+	+	+	+	+	+	+	+
Lavender oil		Xi		0	0			+	+	+	+	+	+	+	+
Lead-(II) acetate	hydrous	T, N		+	+	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Lead-(II) acetate		T, N		+	+	+	+	+	+	+	+	+	+	+	+
Lead-(II) nitrate	hydrous	O, T, N		+	+	+	+	+	+	+	+	+	+	+	+
Lead-(III) nitrate		O, T, N		+	+	+	+	+	+	+	+	+	+	+	+
Lead stearate				+	+	+	+	+	+	+	+	+	+	+	+
Lead sulfate		T, N		+	+	+	+	+	+	+	+	+	+	+	+
Lemon juice				+	+			+	+	+	+	+	+	+	+
Lemon oil		Xi	x	0	0			+	+	+	+	+	+	+	+
Lemongrass oil		Xi		0	0			+	+	+	+	+	+	0	0
Ligroin		F, Xn	x	0	0			+	+	+	+	+	+	+	+
Limonene, DL-		Xn	x	0	0			+	+	+	+	+	+	+	+
Linseed oil	technically pure			+	+			+	+	+	+	+	+	+	+
Liqueurs				+	+			+	+	+	+	+	+	+	+
Liquid soaps				+	+			+	+	+	+	+	+	+	+
Lithium bromide		Xn		+	+			+	+	+	+	+	+	+	+
Lubricating oils				0	0			+	+	+	+	+	+	+	+
Lysol		T		+	0			+	+	+	+	+	+	+	+
Machine oil	100 %			+	0			+	+	+	+	+	+	+	+
Magnesium bromide		Xi		+	+			+	+	+	+	+	+	+	+
Magnesium carbonate	saturated			+	+			+	+	+	+	+	+	+	+
Magnesium chloride	hydrous	Xi		+	+			+	+	+	+	+	+	+	+
Magnesium chlorite		0								+	+	+	+		
Magnesium hydroxide	saturated			+	+			+	+	+	+	+	+	+	+
Magnesium iodide		Xn		+	+			+	+	+	+	+	+	+	+
Magnesium nitrate	saturated	O, Xi		+	+			+	+	+	+	+	+	+	+
Magnesium sulphate	any			+	+			+	+	+	+	+	+	+	+
Maleic acid	saturated	Xn		+	+			+	+	+	+	+	+	+	+
Maleic acid	hydrous	Xn		+	+			+	+	+	+	+	+	+	+
Margarine				+	+			+	+	+	+	+	+	+	+
Marmelade				+	+			+	+	+	+	+	+	+	+
Menthol	solid	Xi		+	0			+	+	+	+	+	+	+	+
Methacrylic acid		C		+	+			+	+	+	+	+	+	0	0
Mercury	pure	T		+	+			+	+	+	+	+	+	+	+
Mercury-(III)-chloride	hydrous	T+, C		+	+			+	+	+	+	+	+	+	+
Mercury-(III)-chloride	saturated	T+		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Mercury nitrate	saturated	T+		+	+	+	+	+	+	+	+	+	+	+	+
Mesityl oxide		Xn	X	0	0			+	+	+	+	+	+		
Methane	technically pure	F+	X	+	+			+	+	+	+	+	+	+	+
Methanol		F, T	X	+	+	+	+	+	+	+	+	+	+	+	+
Methoxy butanol	100 %		X	+	0			+	+	+	+	+	+	+	+
Methoxyethyl oleate				+	+	+	+	+	+	+	+	+	+	+	+
Methyl acetate	technically pure	F	X	+	0			+	+	+	+	+	+	+	-
Methyl acrylate		F, Xn	X	+	+			+	+	+	+	+	+	+	0
Methylamine, [Mono-]	32 %	F+, C	X	+	+			+	+	+	+	+	+	+	0
Methyl benzene		F, Xn	X	0	-			+	+	+	+	+	+	+	+
Methyl butanol		Xn	X	+	+			+	+	+	+	+	+	+	+
Methyl butyl ketone		F, T	X	0	0			+	+	+	+	+	+	+	0
Methyl chloroacetate	technically pure	T/Xi	X	+	+			+	+	+	+	+	+	+	-
Methyl cyclohexane		F, Xn	X	0	0			+	+	+	+	+	+	+	+
Methyl cyclopentane		F	X	0	0			+	+	+	+	+	+	+	+
Methyl dichloroacetate		Xn		+	+			+	+	+	+	+	+	+	0
Methyl ethyl ether	100 %	F+	X	0	0			+	+	+	+	+	+	+	+
Methyl ethyl ether	100 %	F+	X	0	0			+	+	+	+	+	+	+	+
Methyl ethyl ketone (MEK)		F	X	+	0	+	0	+	+	+	+	+	+	+	0
Methyl formate	100 %	F+	X	+	+			+	+	+	+	+	+	+	0
Methyl glycol acetate	100 %	T		+	+			+	+	+	+	+	+	+	+
Methyl isobutyl ketone		F	X	+	+	+	0	+	+	+	+	+	+	+	0
Methyl methacrylate		F, Xi	X	+	+			+	+	+	+	+	+	+	0
Methyl oleate				+	+			+	+	+	+	+	+	+	+
Methyl propyl ketone		F	X	+	0	+	+	+	+	+	+	+	+	+	+
Methyl salicylate		Xn, Xi		+	+			+	+	+	+	+	+	+	0
Methyl sulphuric acid	50 %	C		+	-			+	+	+	+	+	+	+	+
Methyl sulphuric acid	hydrous	C		+	+			+	+	+	+	+	+	+	+
Milk				+	+	+	+	+	+	+	+	+	+	+	+
Mineral oil				+	0	+	+	+	+	+	+	+	+	+	+
Mineral water				+	+	+	+	+	+	+	+	+	+	+	+
Molasses				+	+	+	+	+	+	+	+	+	+	+	+
Molasses extract				+	+	+	+	+	+	+	+	+	+	+	+
Morpholine	technically pure			+	+			+	+	+	+	+	+	+	0

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Motor oil				+	0			+	+	+	+	+	+	+	+
Mowilith D				+				+	+	+	+	+	+	+	+
Mustard				+	+			+	+	+	+	+	+	+	+
Nail polish remover			X	+	0			+	+	+	+	+	+	+	+
Naphtha		Xh		+	0			+	+	+	+	+	+	+	+
Naphthalene	100 %	F, Xn	X	+	0			+	+	+	+	+	+	+	0
Naphthalene (in alcohol)		F, Xn	X	+	0			+	+	+	+	+	+	+	+
Natural gas		F+	X	+	+			+	+	+	+	+	+	+	+
Neon				+	+			+	+	+	+	+	+	+	+
Nickel (III)-chloride	saturated	T		+	+			+	+	+	+	+	+	+	+
Nickel (III)-chloride	hydrous	T		+	+			+	+	+	+	+	+	+	+
Nickel acetate	hydrous	T, N		+	+			+	+	+	+	+	+	+	+
Nickel nitrate	saturated	O, Xn		+	+			+	+	+	+	+	+	+	+
Nickel sulphate	saturated	Xn		+	+			+	+	+	+	+	+	+	+
Nickel sulphate	hydrous	Xh		+	+			+	+	+	+	+	+	+	+
Nicotine		T+		+	+			+	+	+	+	+	+	+	+
Nicotinic acid	diluted	Xi		+	+			+	+	+	+	+	+	+	+
Nitric acid	1-10 %	C		+	+			+	+	+	+	+	+	+	+
Nitric acid	50 %	C+		0	-			+	+	+	+	+	+	+	+
Nitric acid	66 %	C+		-	-			+	+	+	+	+	+	+	+
Nitric acid	70 %	O, C+		-	-			+	+	+	+	+	+	+	+
Nitric acid	100 %	O, C+		-	-					+	+	+	+	+	-
Nitrobenzoic acid		Xh		+	+			+	+	+	+	+	+	+	+
Nitrobenzene		T		+	-			+	+	+	+	+	+	+	+
Nitrocellulose thinner			X	0	0			+	+	+	+	+	+	0	0
Nitroethane		Xh	X	+	+			+	+	+	+	+	+	0	0
Nitrogen				+	+			+	+	+	+	+	+	+	+
Nitrogen tetroxide		O, T+, C		+	+					+	+	+	+	+	+
Nitroglycerin	diluted	E, T+		+	+			+	+	+	+	+	+	0	0
Nitroglycol	diluted	E, T+		+	+			+	+	+	+	+	+	0	0
Nitropropane		T		+	+			+	+	+	+	+	+	0	0
Nitrous fumes	diluted	T		+	-			+	+	+	+	+	+	+	+
Nitrous oxide		O		+	+			+	+	+	+	+	+	+	+
Nitrotoluene	technically pure	T		+	0			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Nonanol	100 %	Xn, Xi		+	+			+	+	+	+	+	+	+	+
Nutmeg	ground	Xn		+	+			+	+	+	+	+	+	+	+
Nutmeg oil			x	+	+			+	+	+	+	+	+	+	+
Octafluorocyclobutane				0	0										
Octan, n-		F, Xn	x	+	+		+	+	+	+	+	+	+	+	+
Octane, n-		F, Xn	x	+	+		+	+	+	+	+	+	+	+	+
Octyl alcohol, -n		Xi		+	+		+	+	+	+	+	+	+	+	+
Octyl alcohol, -n		Xi		+	+		+	+	+	+	+	+	+	+	+
Octyl cresol	100 %			0	0			+	+	+	+	+	+	+	+
Oils, essential				0	-			+	+	+	+	+	+	+	0
Oils and fats, vegetable				+	0			+	+	+	+	+	+	+	+
Oleum	10 % SO ₃	C+		-	-			+	+	+	+	+	+	+	-
Oleum vapours	low			-	-			+	+	+	+	+	+	+	+
Olive oil				+	+			+	+	+	+	+	+	+	+
Oleic acid	technically pure	Xi		+	0			+	+	+	+	+	+	+	+
Orange juice				+	+		+	+	+	+	+	+	+	+	+
Orange peel oil		Xn		0	0			+	+	+	+	+	+	+	0
Oxalic acid	hydrous	Xn		+	+		+	+	+	+	+	+	+	+	+
Oxalic acid		Xn		+	+		+	+	+	+	+	+	+	+	0
Oxygen	technically pure	0		+	0			+	+	+	+	+	+	+	+
Ozone		O, T		0	-		+	+	+	+	+	+	+	+	0
Ozone-air-mixture		O, T		0	-		+	+	+	+	+	+	+	+	+
Palmitic acid	technically pure	Xi		0	-			+	+	+	+	+	+	+	+
Palm kernel oil				+	0			+	+	+	+	+	+	+	+
Palm oil				+	0			+	+	+	+	+	+	+	+
Paraffins	100 %			+	+			+	+	+	+	+	+	+	+
Paraffin emulsion				+	0			+	+	+	+	+	+	+	+
Paraffin wax	melted			+	+			+	+	+	+	+	+	+	+
Paraformaldehyde		F, T	x	+	+			+	+	+	+	+	+	+	+
Peanut oil				+	+			+	+	+	+	+	+	+	+
Petroleum		Xn		+	+			+	+	+	+	+	+	+	+
Perfumes				+	+			+	+	+	+	+	+	+	+
Pectin	hydrous			+	+		+	+	+	+	+	+	+	+	+
Pectin				+	+		+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Penicillin		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Pentachlorobiphenyl		Xn		-	-										
Pentane		F	x	0	0			+	+	+	+	+	+	+	+
Pentanethiol, 1-		Xn	x	+	+			+	+	+	+	+	+	+	+
Pepper	ground			+	+			+	+	+	+	+	+	+	+
Phenacetin		Xn		+	+			+	+	+	+	+	+	+	+
Phenol	10 %	T		+	+			+	+	+	+	+	+	+	+
Phenol	100 %	T, C		+	+			+	+	+	+	+	+	+	+
Perchloroethylene (PER)		Xn		-	-			+	+	+	+	+	+	+	+
Perchloric acid	70 %	E, O, C+		-	-			+	+	+	+	+	+	+	+
Perchloric acid	20 %	Xi		+	0			+	+	+	+	+	+	+	+
Perfluoropropane				0	0										
Petrol		F, Xn, N	x	0	-			+	+	+	+	+	+	+	+
Petroleum ether	technically pure	F, Xn	x	+	0			+	+	+	+	+	+	+	+
Petroleum	technically pure	Xn, N	x	+	0			+	+	+	+	+	+	+	+
Phenolic resin mass				+	+			+	+	+	+	+	+	+	+
Phenyl ethanol		Xn		+	+			+	+	+	+	+	+	+	+
Phenylethyl ether				0	0			+	+	+	+	+	+	+	+
Phenylhydrazine	technically pure	T		0	-			+	+	+	+	+	+	+	+
Phenylhydrazine-HCl		T		+	0			+	+	+	+	+	+	+	+
Phenyl sulphonate				+	+			+	+	+	+	+	+	+	+
Phosgene	liquid	T+, C						+	+	+	+	+	+	0	0
Phosgene	gaseous	T+, C		0	-			+	+	+	+	+	+	0	0
Phosphates	hydrous			0	-			+	+	+	+	+	+	+	+
Phosphine	concentrated	F+, T+	x	0	0					+	+	+	+	+	+
Phosphoric acid	30 %	C		+	+			+	+	+	+	+	+	+	+
Phosphoric acid	85 %	C		+	+			+	+	+	+	+	+	+	+
Phosphoric acid	1-5 %	Xi		+	+			+	+	+	+	+	+	+	+
Phosphoric acid	20 %	Xi		+	+			+	+	+	+	+	+	+	+
Phosphorus oxychloride	100 %	T, C		+	0			+	+	+	+	+	+	+	+
Phosphorus oxychloride		T, C		+	0			+	+	+	+	+	+	+	+
Phosphorus pentachloride		T+, C		+	+			+	+	+	+	+	+	+	+
Phosphorus pentoxide	technically pure	C		+	+			+	+	+	+	+	+	+	+
Phosphorus trichloride		T, C		+	0			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Photographic emulsion				+	+			+	+	+	+	+	+	+	+
Phthalic acid	saturated	Xi		+	+			+	+	+	+	+	+	+	+
Phthalic acid amyl ester	100 %	T		+	+			+	+	+	+	+	+	+	+
Phthalic acid mono amyl ester		Xn		+	+			+	+	+	+	+	+	+	+
Picric acid	1 % hydrous	T		+	+			+	+	+	+	+	+	+	+
Pimento	ground			+	+			+	+	+	+	+	+	+	+
Pineapple juice				+	+		+	+	+	+	+	+	+	+	+
Pine needle oil				+	+			+	+	+	+	+	+	+	0
Piperidine		F, T, C		+	+			+	+	+	+	+	+	+	+
Plasticisers				+	0			+	+	+	+	+	+	+	+
Polyester resins		Xn	x	0				+	+	+	+	+	+	+	+
Polyethylene glycol	100 %			+	+			+	+	+	+	+	+	+	+
Polyran M25 N	80°C														
Polyran M400	80°C														
Polytolvan O	100 %	Xi		+	+			+	+	+	+	+	+	+	+
Potassium acetate	hydrous	Xi		+	+		+	+	+	+	+	+	+	+	+
Potassium alum	diluted	Xi		+	+		+	+	+	+	+	+	+	+	+
Potassium alum	saturated	Xi		+	+		+	+	+	+	+	+	+	+	+
Potassium borate	10 %	Xh		+	+		+	+	+	+	+	+	+	+	+
Potassium borate	hydrous	Xn		+	+		+	+	+	+	+	+	+	+	+
Potassium bromate	saturated	O, T		+	+			+	+	+	+	+	+	+	+
Potassium bromate	hydrous	O, T		+	+			+	+	+	+	+	+	+	+
Potassium bromide	any	Xn		+	+			+	+	+	+	+	+	+	+
Potassium carbonate	hydrous	Xh		+	+			+	+	+	+	+	+	+	+
Potassium carbonate	saturated	Xn		+	+			+	+	+	+	+	+	+	0
Potassium chlorate	saturated	O, Xn		+	+			+	+	+	+	+	+	+	+
Potassium chlorate	hydrous	O, Xn		+	+			+	+	+	+	+	+	+	+
Potassium chloride	hydrous	Xi		+	+		+	+	+	+	+	+	+	+	+
Potassium chromate	saturated	T		+	+			+	+	+	+	+	+	+	+
Potassium chromate	hydrous	T		+	+			+	+	+	+	+	+	+	+
Potassium cyanide	saturated	T+		+	+			+	+	+	+	+	+	+	0
Potassium cyanide	hydrous	T+		+	+			+	+	+	+	+	+	+	0
Potassium dichromate	saturated	T		+	+			+	+	+	+	+	+	+	+
Potassium dichromate	hydrous	T		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/PEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Potassium ferricyanide	any	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Potassium ferrocyanide	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Potassium ferrocyanide	diluted			+	+	+	+	+	+	+	+	+	+	+	+
Potassium fluoride		T		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydrogen carbonate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydrogen sulfate	hydrous	C		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydrogen sulfate		C		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydrogen tartrate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydroxide	30 %	C+		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydroxide	10 %	C+		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydroxide	1 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Potassium hydroxide	50 %	C+		+	+	+	+	+	+	+	+	+	+	+	0
Potassium hydroxide	concentrated	C+		+	+	+	+	+	+	+	+	+	+	+	0
Potassium hydroxide	diluted	O, C		+	0	+	+	+	+	+	+	+	+	+	+
Potassium hypochlorite				+	+	+	+	+	+	+	+	+	+	+	+
Potassium iodate		O		+	+	+	+	+	+	+	+	+	+	+	+
Potassium iodide	saturated	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Potassium iodide	hydrous	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Potassium nitrate	50 %	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium nitrate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium perchlorate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium perchlorate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium permanganate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium permanganate		O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium persulfate	any	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Potassium sulfate	hydrous	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Potassium sulfide	diluted	C		+	+	+	+	+	+	+	+	+	+	+	+
Potassium sulfite	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Potassium thiosulfate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Prontosil		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Propane	liquid	F+	x	+	+	+	+	+	+	+	+	+	+	+	+
Propane		F+	x	+	-	+	+	+	+	+	+	+	+	+	+
Propanoic acid	50 %	C		+	0	+	+	+	+	+	+	+	+	+	+
Propanol	gaseous	F	x	+	+	+	+	+	+	+	+	+	+	+	+
Propene	7 %	F+	x	+	+	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Propyl acetate		F	x	+	+			+	+	+	+	+	+	+	+
Propylamine, n-		F, C, Xn	x	+	+			+	+	+	+	+	+	+	+
Propylene glycol				+	+	+	+	+	+	+	+	+	+	+	+
Propylene glycol methyl ether			x	+	+	+	+	+	+	+	+	+	+	+	+
Propylene oxide		F+, T	x	+	+	0	-	+	+	+	+	+	+	+	-
Propyl nitrate		E, Xn	x	+	+	+	+	+	+	+	+	+	+	+	0
Pydraul C (3152, 540)		Xn													
Pydraul E (29, 30 50 ,65 ,90 11)		Xh													
Pyridine		F, Xn	x	0	0	+	+	+	+	+	+	+	+	+	0
Pyrogallol		Xn		+	+			+	+	+	+	+	+	+	+
Pyrrole		Xh	x	0	0			+	+	+	+	+	+	+	0
Quinine		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Ramasit															+
Resorcinol	5 %			+	+	+	0	+	+	+	+	+	+	+	0
Resorcinol	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Rose oil				+	+			+	+	+	+	+	+	+	+
Roaster gases	any	T		+	+			+	+	+	+	+	+	+	+
Rum flavour				+	+			+	+	+	+	+	+	+	0
Saccharic acid	saturated	Xi		+	+			+	+	+	+	+	+	+	+
Sagrotan	liquid			+	0			+	+	+	+	+	+	+	+
Salicylaldehyde		Xn, Xi		+	+	+	-	+	+	+	+	+	+	+	0
Salicylic acid	saturated	Xn, Xi		+	+	+	+	+	+	+	+	+	+	+	+
Salicylic acid	powder	Xn, Xi		+	+	+	+	+	+	+	+	+	+	+	+
Salt water, sea water				+	+	+	+	+	+	+	+	+	+	+	+
Saturated vapour condensate				+	+			+	+	+	+	+	+	+	+
Silicone grease				+	+			+	+	+	+	+	+	+	+
Silicic acid	any			+	+	+	+	+	+	+	+	+	+	+	+
Silicone oil				+	+			+	+	+	+	+	+	+	+
Silver acetate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Silver cyanide		T		+	+			+	+	+	+	+	+	+	+
Silver nitrate	hydrous	C		+	+			+	+	+	+	+	+	+	+
Silver nitrate		C		+	+			+	+	+	+	+	+	+	+
Skydrol 500 (B4)		Xn						+	+	+	+	+	+	+	+
Skydrol 7000		Xn						+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Soap solution	any			+	+	+	+	+	+	+	+	+	+	+	+
Sodium acetate	any			+	+	+	+	+	+	+	+	+	+	+	+
Sodium aluminium sulfate				+	+	+	+	+	+	+	+	+	+	+	+
Sodium benzoate	36 %	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium benzoate	hydrous	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Sodium benzoate		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium bicarbonate	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Sodium besulfate	10 %	C		+	+	+	+	+	+	+	+	+	+	+	+
Sodium besulfate	any	C		+	+	+	+	+	+	+	+	+	+	+	+
Sodium besulfite	hydrous	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium borate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium borate	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium bromate	any	O, T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium bromide	any	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium carbonate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium carbonate	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	0
Sodium carbonate		Xi		+	+	+	+	+	+	+	+	+	+	+	0
Sodium chlorate	any	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium chlorate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium chloride	any			+	+	+	+	+	+	+	+	+	+	+	+
Sodium chloride	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Sodium chlorite	diluted	O, Xn		+	0	+	+	+	+	+	+	+	+	+	+
Sodium chromate	diluted	T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium cyanide	saturated	T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium cyanide	hydrous	T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium dichromate		T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium disulfite	any	Xh		+	+	+	+	+	+	+	+	+	+	+	+
Sodium dithionite	10 %	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Sodium dithionite		Xh		+	+	+	+	+	+	+	+	+	+	+	0
Sodium dodecylbenzenesulphonate		Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium fluoride	saturated	T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium hexacyanoferrate-(II)		Xh		+	+	+	+	+	+	+	+	+	+	+	+
Sodium hexametaphosphate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Sodium hydroxide	concentrated	C		+	+	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Sodium hydroxide	30 %	C+		+	+			+	+	+	+	+	+	+	+
Sodium hydroxide	45 %	C+		+	+					+	+	+	+	+	+
Sodium hydroxide	60 %	C+		+	+					+	+	+	+	+	+
Sodium hydroxide	1 %	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium hydroxide	50 %	C+		+	+	+	+	+	+	+	+	+	+	+	+
Sodium hypochlorite	saturated	O, C		+	0			+	+	+	+	+	+	+	0
Sodium hypochlorite	diluted	O, C		+	0			+	+	+	+	+	+	+	+
Sodium hypochlorite	12,5 % Cl	O, C		+	0	+	+	+	+	+	+	+	+	+	+
Sodium hypochlorite	15 %	O, C		+	0	+	+	+	+	+	+	+	+	+	0
Sodium iodide	any	Xi		+	+	+	+	+	+	+	+	+	+	+	0
Sodium nitrate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium nitrate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium nitrite	saturated	O, T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium nitrite	hydrous	O, T		+	+	+	+	+	+	+	+	+	+	+	+
Sodium oxalate	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	0
Sodium perborate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium perborate	hydrous	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium perchlorate	saturated	O, Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium peroxide	10 %	O, C+		+	+	+	+	+	+	+	+	+	+	+	+
Sodium peroxide	saturated	O, C+		+	+	+	+	+	+	+	+	+	+	+	+
Sodium persulphate	saturated	O, Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium phosphate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium phosphate	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium silicate	saturated	C, Xn		+	+	+	+	+	+	+	+	+	+	+	0
Sodium silicate	any	C, Xn		+	+	+	+	+	+	+	+	+	+	+	0
Sodium stearate	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium sulphate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Sodium sulphate	hydrous			+	+	+	+	+	+	+	+	+	+	+	+
Sodium sulphate				+	+	+	+	+	+	+	+	+	+	+	+
Sodium sulphide	hydrous	C		+	+	+	+	+	+	+	+	+	+	+	+
Sodium sulphide	saturated	C		+	+	+	+	+	+	+	+	+	+	+	0
Sodium sulphite	saturated	Xn		+	+	+	+	+	+	+	+	+	+	+	+
Sodium thiosulphate	any	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Sodium thiosulphate	saturated	Xi		+	+	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Sodium thiosulphate	hydrous	Xi		+	+			+	+	+	+	+	+	+	+
Soft soap	diluted			+	+			+	+	+	+	+	+	+	+
Soybean oil				+	+			+	+	+	+	+	+	+	+
Spermaceti				+	+			+	+	+	+	+	+	+	+
Spindle oil				+	-			+	+	+	+	+	+	+	+
Spinning bath acids	100 mg CS ₂ /l			+	+			+	+	+	+	+	+	+	+
Spinning solution, viscose ~		Xn, Xi		+	+			+	+	+	+	+	+	+	+
Spirituous liquors				+	+			+	+	+	+	+	+	+	+
Spruce needle oil				+	+			+	+	+	+	+	+	+	+
Starch solution	any			+	+			+	+	+	+	+	+	+	+
Starch syrup				+	+			+	+	+	+	+	+	+	+
Stauffer grease				+	+			+	+	+	+	+	+	+	+
Stearic acid	crystals	Xi		+	0			+	+	+	+	+	+	+	+
Steam	up to 150 °C			0	0										
Strontium bromide		Xi		+	+			+	+	+	+	+	+	+	+
Strychnine		T+		+	+			+	+	+	+	+	+	+	+
Styrene	100 %	Xn, Xi	x	0	-			+	+	+	+	+	+	+	+
Succinic acid	50 %	Xi		+	+			+	+	+	+	+	+	+	+
Succinic acid	saturated	Xi		+	+			+	+	+	+	+	+	+	+
Sugar beet juice				+	+			+	+	+	+	+	+	+	+
Sugar syrup				+	+			+	+	+	+	+	+	+	+
Sulphur	technically pure	Xi		+	+			+	+	+	+	+	+	+	+
Sulphur, melted, 121 °C				-	-										
Sulphur chloride		C		-	-			+	+	+	+	+	+	+	+
Sulphur dioxide	damp	T, C		+	0			+	+	+	+	+	+	+	-
Sulphur dioxide	liquid	T, C		-	-			+	+	+	+	+	+	+	-
Sulphur hexafluoride				+	+										
Sulphur trioxide		C+		-	-			+	+	+	+	+	+	+	0
Sulphuric acid	1-6 %	Xi		+	+			+	+	+	+	+	+	+	+
Sulphuric acid	20 %	Xi		+	+			+	+	+	+	+	+	+	+
Sulphuric acid	40 %	C+		+	+			+	+	+	+	+	+	+	+
Sulphuric acid	60 %	C+		+	0			+	+	+	+	+	+	+	+
Sulphuric acid	80 %	C+		+	+			+	+	+	+	+	+	+	+
Sulphuric acid	95 %	C+		0	-			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Sulphurous acid	saturated	C		+	+			+	+	+	+	+	+	+	+
Sulphuric acid	fuming	C+		-	-			+	+	+	+	+	+	-	-
Sulphurylchlorid	technically pure	C		-	-					+	+	+	+	0	0
Surfactants	5 %			+	+			+	+	+	+	+	+	+	+
Tallow	technically pure			+	+			+	+	+	+	+	+	+	+
Tannin	10 %	Xi		+	+			+	+	+	+	+	+	+	+
Tanning extracts		Xi		+	+			+	+	+	+	+	+	+	+
Tanning extracts, vegetable	technically usual			+	+			+	+	+	+	+	+	+	+
Tar		T		+	+			+	+	+	+	+	+	+	+
Tartaric acid	hydrous	Xi		+	+			+	+	+	+	+	+	+	+
Tartaric acid		Xi		+	+		+	+	+	+	+	+	+	+	+
Turpentine oil		Xn	x	-	-			+	+	+	+	+	+	+	0
ISO-Fluid A		Xn, N	x	0	0			+	+	+	+	+	+	+	+
ISO-Fluid B		Xn, N	x	0	0			+	+	+	+	+	+	+	+
ISO-Fluid C		Xn, N	x	0	0			+	+	+	+	+	+	+	+
ISO-Fluid D		Xn, N	x	0	0			+	+	+	+	+	+	+	+
Tetrabromomethane (TBE)	100 %	T+		0	-			+	+	+	+	+	+	+	+
Tetrachloroethan	technically pure	T+		0	-			+	+	+	+	+	+	+	0
Tetrachloromethane (TETRA)		T		-	-		+	+	+	+	+	+	+	+	0
Tetra-ethyl lead (TEL)	technically pure	T+	x	+	-			+	+	+	+	+	+	+	+
Tetraethyl orthosilicate		Xn	x	+	+			+	+	+	+	+	+	+	+
Tetrafluoromethane				0	0					+	+	+	+	+	+
Tetrahydrofuran (THF)		F, Xi	x	0	-		+	+	+	+	+	+	+	0	0
Tetrahydrofurfuryl alcohol		Xi		+	+			+	+	+	+	+	+	+	+
Tetrahydronaphthalene	technically pure	Xi		-	-			+	+	+	+	+	+	+	+
Thioglycolic acid		T, C		+	+			+	+	+	+	+	+	0	0
Thionyl chloride	technically pure	C		-	-		+	+	+	+	+	+	+	0	0
Thiophene		F, Xn	x	0	-			+	+	+	+	+	+	0	0
Thymol		C, Xn		0	0			+	+	+	+	+	+	+	+
Tin-(III)-chloride	hydrous	C, Xn		+	+			+	+	+	+	+	+	+	+
Tin-(III)-chloride	saturated	C, Xn		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Tin-(IV)-chloride	hydrous	C		+	+			+	+	+	+	+	+	+	+
Titanium tetrachloride		C		0	0			+	+	+	+	+	+	0	0
Tragacanth				+	+	+	+	+	+	+	+	+	+	+	+
Train oil				+	+			+	+	+	+	+	+	+	+
Transformer oil				+	0			+	+	+	+	+	+	0	0
Triacetin		Xn		+	+			+	+	+	+	+	+	+	+
Tributyl citrate				+	0	+	+	+	+	+	+	+	+	+	+
Tributyl phosphite (TBP)	technically pure	Xn		+	0			+	+	+	+	+	+	+	+
Trichloroacetaldehyde	100 %	T/Xi		+	+			+	+					-	-
Trichloroacetic acid (TCA)		C+		+	+			+	+	+	+	+	+	+	+
Trichlorobenzene	100 %	Xn		-	-			+	+	+	+	+	+	0	0
Trichloroethane		Xn		-	-	+	+	+	+	+	+	+	+	+	0
Trichloroethylene (TRI)	100 %	Xn		-	-	+	+	+	+	+	+	+	+	+	+
Trichlorofluoromethane		N		0	0			0	0	+	+	+	+	+	+
Trichlorophenol		Xn, Xi		0	0			+	+	+	+	+	+	0	0
Trichlorotrifluoroethane				0	0					+	+	+	+	+	+
Tricresyl phosphate (TCF)	technically pure	T/Xn, N		+	0			+	+	+	+	+	+	0	0
Triethanolamine (TEA)	technically pure	Xi		+	+			+	+	+	+	+	+	+	+
Triethylamine (TEA)	technically pure	F, C, Xn	x	-	-			+	+	+	+	+	+	0	-
Trifluorotrichloroethane	100 %			-	-					+	+	+	+	+	+
Triglycol		Xi		+	+			+	+	+	+	+	+	+	+
Triglycol acetate				+	+			+	+	+	+	+	+	0	0
Triisopropylbenzene				0	0			+	+	+	+	+	+	+	+
Trimethylbenzen		Xn	x	0	0			+	+	+	+	+	+	+	+
Trimethylolpropane	hydrous			+	+			+	+	+	+	+	+	+	+
Trioctyl phosphate	technically pure	Xn		+	0			+	+	+	+	+	+	0	0
Tripropylene Glycol (TPG)				+	+	+	+	+	+	+	+	+	+	+	+
Trisodium phosphate		Xi		+	+			+	+	+	+	+	+	+	+
Turbine oil (based on mineral oil)				+	0			+	+	+	+	+	+	+	+
Two-stroke oil	100 %			+	0			+	+	+	+	+	+	+	+
Undecyl alcohol		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Urea	hydrous	Xi		+	+	+	+	+	+	+	+	+	+	+	+
Urea		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Uric acid		Xi		+	+	+	+	+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Urine				+	+	+	+	+	+	+	+	+	+	+	+
Valerian drops				+	+			+	+	+	+	+	+	+	+
Vaseline	technically pure			+	0			+	+	+	+	+	+	+	+
Vaseline oil	100 %			+	0			+	+	+	+	+	+	+	+
Vaseline oil				+	0			+	+	+	+	+	+	+	+
Vegetable oils				+	0			+	+	+	+	+	+	+	+
Vinegar		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Vinyl acetate	technically pure	F	x	+	-			+	+	+	+	+	+	+	+
Vinylidene chloride		F+, Xn	x	-	-	+	0	+	+	+	+	+	+	+	+
Vitamin C				+	+	+	+	+	+	+	+	+	+	+	+
Walnut oil	liquid			+	0			+	+	+	+	+	+	+	+
Washing agents				+	+			+	+	+	+	+	+	+	+
Water				+	+			+	+	+	+	+	+	+	+
Water, distilled ~				+	+			+	+	+	+	+	+	+	+
Wax alcohol	technically pure			0	-			+	+	+	+	+	+	+	+
Waxes				+	0			+	+	+	+	+	+	+	+
Whey		C, Xn	x	+	+			+	+	+	+	+	+	+	+
Whiskey				+	+			+	+	+	+	+	+	+	+
White Spirit		Xh		+	0			+	+	+	+	+	+	+	+
White spirit		Xn, N	x	0	0			+	+	+	+	+	+	+	+
White Spirit	liquid	Xn, N	x	0	-			+	+	+	+	+	+	+	+
Wine				+	+			+	+	+	+	+	+	+	+
Wine spirit	50 %	F	x	+	+			+	+	+	+	+	+	+	+
Wine spirit	96 %	F	x	+	+			+	+	+	+	+	+	+	+
Wood oil				+	+			+	+	+	+	+	+	+	+
Xenon				+	+			+	+	+	+	+	+	+	+
Xylene		F, Xn	x	-	-			+	+	+	+	+	+	+	0
Yeast	any			+	+			+	+	+	+	+	+	+	+
Zinc acetate	hydrous	Xn, Xi		+	+			+	+	+	+	+	+	+	+
Zinc bromide		C, Xn		+	+			+	+	+	+	+	+	+	+
Zinc carbonate	saturated			+	+			+	+	+	+	+	+	+	+
Zinc chloride	hydrous	C, Xn		+	+			+	+	+	+	+	+	+	+
Zinc chloride	10 %	C, Xn		+	+			+	+	+	+	+	+	+	+
Zinc nitrate		O, C, Xn		+	+			+	+	+	+	+	+	+	+

Chemical Resistance Chart



Medium	Concentration	Hazard note	Flammable	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
				20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Zinc oxide	solid	Xn, Xi		+	+	+	+	+	+	+	+	+	+	+	+
Zinc phosphate	saturated			+	+	+	+	+	+	+	+	+	+	+	+
Zinc oxide ointment				+	+			+	+	+	+	+	+	+	+
Zinc sludge				+	+					+	+	+	+	+	+
Zinc stearate		Xi		+	+	+	+	+	+	+	+	+	+	+	+
Zinc sulphate	10 %			+	+	+	+	+	+	+	+	+	+	+	+

Chemical resistance of plastics to substance groups

Substance groups at 20 °C	PP		ECTFE/ETFE		PFA/FEP		PTFE		TFM		PVDF	
	20°C	20°C	20°C	20°C	20°C	20°C	20°C	20°C	20°C	20°C	20°C	20°C
Alcohols, aliphatic	+	+		+		+		+		+		+
Ethers	0	+		+		+		+		+		+
Aldehydes	+	+		+		+		+		+		+
Esters	0	+		+		+		+		+		+
Hydrocarbons, aliphatic	+	+		+		+		+		+		+
Hydrocarbons, aromatic	0	+		+		+		+		+		+
Hydrocarbons, halogenated	0	+		+		+		+		+		+
Ketones	0	0		0		+		+		+		+
Lyes	+	+		+		+		+		+		+
Acids strong or concentrated	+	+		+		+		+		+		+
Acids weak or diluted	+	+		+		+		+		+		+
Oxidizing acid, Oxidizing agent	-	+		+		+		+		+		+

The recommendations, carefully drafted by the technical literature as well as by the raw materials manufacturers, are intended to inform and to advise. However, they cannot replace the suitability test by the user under the particular conditions of application.