

Chemical Resistance of HDPE Corrugated Pipe

Chemical corrosion of a pipe system is the deterioration that can occur from the chemical action of the effluent on the pipe material. In some cases, this deterioration can lead to a loss of structural integrity and significantly shorten the design service life of the pipeline. In storm sewer applications, chemical corrosion is most common in the pipe invert.

The materials used to manufacture the pipe product determine its ability to resist attacks from the chemicals present in the effluent. Thermoplastics, such as High Density Polyethylene (HDPE), withstand the effects of most acidic or alkaline chemicals. HDPE more specifically, is one of the most chemically stable thermoplastics currently used in sewer and drainage applications.

A detailed list of chemical resistance data is included in **Appendix A, "TR-19/2007 Chemical Resistance of Thermoplastics Piping Materials"**. Used with permission. © 2017 The Plastics Pipe Institute Inc.

Corrugated High Density Polyethylene Pipe (HDPE) has a documented history of performance. The Ministry of Ontario's *"Gravity Pipe Design Guidelines"*, April 2014 confirms a design service life of 75 years for HDPE pipe. HDPE pipe demonstrates a high resistance to chemical corrosion, outperforming traditional storm sewer materials such as concrete, steel and aluminum.

Resistance Codes

The following code is used in the data table:

Code	Meaning	Typical Result
140	Plastic type is generally resistant to temperature (°F) indicated by code.	Swelling < 3% or weight loss < 0.5% and elongation at break not significantly changed.
R to 73	Plastic type is generally resistant to temperature (°F) indicated by code and may have limited resistance at higher temperatures.	Swelling < 3% or weight loss < 0.5% and elongation at break not significantly changed.
C to 73	Plastic type has limited resistance to temperature (°F) indicated by code and may be suitable for some conditions.	Swelling 3-8% or weight loss 0.5-5% and/or elongation at break decreased by < 50%.
N	Plastic type is not resistant.	Swelling > 8% or weight loss > 5% and/or elongation at break decreased by > 50%.
—	Data not available.	

Plastic Materials Identification

ABS	acrylonitrile-butadiene-styrene
CPVC	chlorinated polyvinyl chloride
PP	polypropylene
PVC	polyvinyl chloride
PE	polyethylene
PB	polybutylene
PVDF	poly vinylidene fluoride
PEX	crosslinked polyethylene
PA11	polyamide 11
PK	polyketone

Used with permission. © 2017 The Plastics Pipe Institute Inc.

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Acetaldehyde CH ₃ CHO	--	---	N	140	N	C to 73	C to 73	---	C to 140	C to 176	R to 73
	Aq. Of 40%	---	N	---	C to 73	R to 73	---	N	R to 73	---	---
Acetamide CH ₃ CONH ₂	5%	120	---	140	---	140	---	---	140	---	---
Acetic Acid CH ₃ COOH	vapor	120	180	180	140	140	140	---	140	---	---
	5%	---	---	---	---	---	---	---	---	---	R to 176
	10%	---	---	---	---	---	---	R to 248	140	R to 176	---
	25%	N	180	180	140	140	140	---	140	---	---
	40%	---	---	---	---	---	---	R to 140	R to 176	---	---
	50%	---	---	---	---	---	-	R to 140	R to 176	C to 68	---
	60%	N	N	180	73	73	73	R to 104	73	---	---
	80%	---	---	---	---	---	---	R to 104	---	---	---
	85%	N	N	120	73	73	73	---	73	---	---
	glacial	N	N	120	73	73	73	R to 104	R to 68	---	---
Acetic Anhydride (CH ₃ CO) ₂ O	---	N	N	73	N	73	140	N	73	C to 68	---
Acetone CH ₃ COCH ₃	5%	N	N	73	N	C to 73	140	R to 212	C to 73	C to 140	---
	10%	---	---	---	---	---	---	R to 122	---	---	---
	100%	---	---	---	---	---	---	---	---	---	R to 73 C to 122
Acetophenone C ₆ H ₅ COCH ₃	---	N	---	120	--	73	---	R to 68	73	---	---
Acetyl Chloride CH ₃ COCl	---	N	N	---	N	---	---	N	---	---	---
Acetylene HC≡CH	gas 100%	73	N	73	N	73	C to 73	---	73	140	---
Acetylnitrile	---	---	N	---	N	---	---	---	---	---	---
Acrylic Acid H ₂ C=CHCOOH	97%	---	N	---	N	140	---	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Acrylonitrile H ₂ C=CHC≡N	---	---	N	---	N	140	---	---	140	---	---
Adipic Acid COOH(CH ₂) ₄ COOH	sat'd	---	180	140	140	140	73	R to 176	140	---	---
Allyl Alcohol CH ₂ =CHCH ₂ OH	96%	---	C to 73	140	R to 73	140	140	---	N	---	---
Allyl Chloride CH ₂ =CHCH ₂ Cl	-- Liquid	---	N	---	N	C to 73	---	140	C to 73	---	---
		---	---	---	---	---	---	R to 68	---	---	---
Aluminum Ammonium Sulfate (Alum) AlNH ₄ (SO ₄) ₂ •12H ₂ O	sat'd	---	180	140	140	140	---	---	140	---	---
Aluminum Chloride Aqueous AlCl ₃	sat'd	160	180	180	140	140	140	R to 212	140	---	---
Aluminum Fluoride Anhydrous AlF ₃	sat'd	160	180	180	73	140	140	R to 212	140	---	---
Aluminum Hydroxide Al(OH) ₃	sat'd	160	180	180	140	140	140	R to 212	140	---	N
Aluminum Nitrate Al(NO ₃) ₃ •9H ₂ O	sat'd	---	180	180	140	140	140	R to 212	140	---	---
Aluminum Oxychloride	--	---	180	180	140	---	140	---	---	---	---
Aluminum Potassium Sulfate (Alum) AlK(SO ₄) ₂ •12H ₂ O	sat'd	160	180	140	140	140	---	R to 212	140	---	---
Aluminum Sulfate (Alum) Al ₂ (SO ₄) ₃	sat'd 20%	160 ---	180 ---	140 ---	140 ---	140 ---	C to 73 ---	R to 212 ---	140 ---	194 ---	--- R to 73
Ammonia Gas NH ₃	100%	N	N	140	140	140	140	---	140	140	---
Ammonia Liquid NH ₃	100%	160	N	140	N	140	73	---	140	140	---
Ammonium Acetate CH ₃ COONH ₄	sat'd	120	180	73	140	140	---	R to 212	140	---	---
Ammonium Bifluoride NH ₄ HF ₂	sat'd	---	180	180	140	---	140	---	140	---	---
Ammonium Bisulfide (NH ₄)HS	---	---	---	---	140	---	---	---	---	---	---
Ammonium Carbonate (NH ₄) ₂ CO ₃	sat'd	---	180	212	140	140	140	R to 248	140	---	---
Ammonium Chloride NH ₄ Cl	sat'd	120	180	212	140	140	140	R to 212	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Ammonium Dichromate (NH ₄) ₂ Cr ₂ O ₇	--	---	73	---	73	---	---	---	---	---	---
Ammonium Fluoride NH ₄ F	10%	120	180	212	140	140	---	R to 212	140	---	---
	25%	120	180	212	C to 140	140	73	---	140	---	---
Ammonium Hydroxide NH ₄ OH	10%	120	N	212	140	140	140	---	140	---	N
	30%	---	---	---	---	R to 140	---	---	R to 140	---	---
	Conc.	---	---	---	---	---	---	---	194	---	---
Ammonium Metaphosphate	Sat'd	--	--	R to 212	R to 140	R to 140	R to 140	R to 248	R to 140	---	---
Ammonium Nitrate NH ₄ NO ₃	sat'd	120	180	212	140	140	140	R to 212	140	---	---
Ammonium Persulfate (NH ₄) ₂ S ₂ O ₈	---	---	180	140	140	140	140	R to 212	140	---	---
Ammonium Phosphate (Monobasic) NH ₄ H ₂ PO ₄	all	120	180	212	140	140	140	R to 248	140	---	---
Ammonium Sulfate (NH ₄) ₂ SO ₄	Sat'd.	120	180	212	140	140	140	R to 212	140	---	---
	20%	---	---	---	---	---	---	---	---	---	R to 73
Ammonium Sulfide (NH ₄) ₂ S	dilute	120	180	212	140	140	140	---	140	---	---
	Sat'd.	---	---	---	---	140	---	---	---	---	---
Ammonium Thiocyanate NH ₄ SCN	50-60%	120	180	212	140	140	140	R to 212	73	---	---
Amyl Acetate CH ₃ COOC ₅ H ₁₁	--	N	N	N	N	73	---	R to 122	73	C to 194	---
Amyl Alcohol C ₅ H ₁₁ OH	--	---	N	---	N	140	140	R to 212	R to 140	---	---
	100%	---	---	---	---	---	C to 140	---	---	---	---
n-Amyl Chloride CH ₃ (CH ₂) ₃ CH ₂ Cl	--	N	N	N	N	C to 73	---	---	C to 73	---	---
Anisole C ₇ H ₈ O	--	---	---	---	---	---	---	---	---	---	C to 73
Aniline C ₆ H ₅ NH ₂	--	N	N	---	N	73	C to 140	R to 68	C to 140	---	N
Aniline Chlorohydrate	--	---	N	---	N	C to 73	N	---	C to 73	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Aniline Hydrochloride C ₆ H ₅ NH ₂ •HCl	sat'd	---	N	---	N	140	N	---	140	---	---
Anthraquinone C ₁₄ H ₈ O ₂	--	---	180	---	140	C to 73	C to 73	---	C to 73	---	---
Anthraquinone Sulfonic Acid C ₁₄ H ₇ O ₂ • SO ₃ • H ₂ O	--	---	180	73	140	140	C to 73	---	C to 73	---	---
Antifreeze	--	---	---	---	---	---	---	---	---	---	R to 73 C to 176
Antimony Trichloride SbCl ₃	sat'd	---	180	140	140	140	140	R to 140	140	---	---
Aqua Regia (Nitrohydrochloric Acid)	--	N	R to 73	N	C to 73	N	N	C to 194	N	---	---
Arsenic Acid H ₃ AsO ₄	80%	---	180	140	140	140	140	R to 248	140	---	---
Aryl Sulfonic Acid C ₆ H ₅ SO ₃ H	--	---	180	---	140	73	---	---	73	---	---
Asphalt	--	---	N	73	N	73	140	---	73	---	---
Barium Carbonate BaCO ₃	sat'd	120	180	140	140	140	140	R to 248	140	---	---
Barium Chloride BaCl ₂ • 2H ₂ O	sat'd	120	180	140	140	140	140	R to 212	140	194	---
Barium Hydroxide Ba(OH) ₂	sat'd	73	180	140	140	140	140	---	R to 212	---	---
	10%	---	---	---	---	---	---	---	---	---	R to 73
	30%	---	---	---	---	R to 140	---	---	R to 140	---	---
Barium Nitrate Ba(NO ₃) ₂	sat'd	73	180	140	73	140	---	---	140	---	---
Barium Sulfate BaSO ₄	sat'd	73	180	140	140	140	140	R to 212	140	---	---
Barium Sulfide BaS	sat'd	73	180	140	140	140	140	---	R to 248	---	---
Beer	--	120	180	180	140	R to 140	140	R to 248	R to 140	68	R to 73
Beet Sugar Liquors	--	---	180	180	140	73	140	---	73	---	---
Benzaldehyde C ₆ H ₅ CHO	10%	N	R to 73	73	R to 73	73	C to 73	---	73	R to 104	---
	99%	---	---	---	---	---	---	---	---	---	C to 73
Benzene C ₆ H ₆	--	N	N	N	N	C to 120	N	C to 122	R to 68	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Benzene Sulfonic Acid C ₆ H ₅ SO ₃ H	10%	---	180	180	140	R to 73	---	---	R to 73	---	---
	10%+	---	N	---	N	---	---	---	---	---	---
Benzoic Acid C ₆ H ₅ COOH	all	160	180	73	140	140	140	---	R to 248	---	---
Benzoyl Chloride C ₆ H ₅ COCl	Sat. Sol.	---	---	---	---	---	---	C to 68	---	---	---
Benzyl Alcohol C ₆ H ₅ CH ₂ OH	--	---	N	120	N	140	---	R to 122	140	R to 68	---
Benzyl Chloride C ₇ H ₇ Cl	--	---	---	---	---	---	---	---	R to 140	---	---
Bismuth Carbonate (BiO) ₂ CO ₃	Sat'd.	---	180	180	140	140	140	---	140	---	---
Black Liquor	sat'd	---	180	140	140	120	140	---	120	---	---
Bleach	5% Active Cl ₂	---	180	120	140	C to 140	---	---	C to 140	---	R to 73
	12% Active Cl ₂	73	185	120	140	73	140	---	73	---	---
Borax Na ₃ B ₄ O ₇ •10H ₂ O	sat'd	160	180	212	140	140	140	---	140	---	---
Boric Acid H ₃ BO ₃	Sat'd	160	180	212	140	140	140	R to 212	140	---	---
Brake Fluid	--	---	---	140	---	140	---	---	140	---	---
Brine	sat'd	---	180	140	140	140	140	---	140	---	---
Bromic Acid HBrO ₃	Sat'd	---	180	N	140	N	140	R to 212	N	---	---
	10%	---	---	---	---	140	---	---	---	---	---
Bromine Br ₂	Liquid	73	N	N	N	N	N	R to 248	N	N	---
	vapor 25%	---	180	N	140	N	---	---	N	---	---
Bromine Water	cold sat'd	---	180	N	140	N	C to 73	R to 176	N	---	---
Bromobenzene C ₆ H ₅ Br	--	---	---	---	N	---	---	---	---	---	---
Bromotoluene (Benzyl bromide) C ₆ H ₅ CH ₂ Br	--	---	---	C	N	---	---	---	---	---	---
Butadiene H ₂ C=CHCH=CH ₂	50%	---	180	N	140	73	---	---	73	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Butadiene H ₂ C=CHCH=CH ₂	Gas	---	---	---	---	---	---	R to 212	---	---	---
Butane C ₄ H ₁₀	50%	---	180	140	140	140	N	---	140	---	---
	Gas	---	---	---	---	---	---	R to 68	---	---	---
n-Butanol C ₄ H ₉ OH	Liquid	---	---	---	---	---	---	R to 140	---	---	R to 73
Butyl Acetate CH ₃ COOCH ₂ CH ₂ CH ₂ CH ₃	100%	N	N	C to 73	N	C to 73	C to 73	C to 104	C to 73	R to 194	---
Butyl Alcohol CH ₃ (CH ₂) ₂ CH ₂ OH	--	---	C to 73	180	140	140	140	---	140	C to 104	---
Butyl Cellosolve HOCH ₂ CH ₂ O(CH ₂) ₃ CH ₃	--	---	N	---	73	---	---	---	---	---	---
n-Butyl Chloride C ₄ H ₉ Cl	--	N	N	---	---	---	---	---	---	---	---
Butyl Glycol HOCH ₂ CH ₂ O(CH ₂) ₃ CH ₃	Liquid	---	---	---	---	---	---	R to 212	---	---	---
Butylene © CH ₃ CH=CHCH ₃	Liquid	---	---	N	140	120	---	---	120	---	---
Butyl Phenol C ₄ H ₉ C ₆ H ₄ OH	--	---	---	N	C to 73	73	73	---	R to 176	---	---
Butyl Phthalate C ₁₆ H ₂₂ O ₄	--	---	N	180	---	---	---	R to 140	---	---	---
Butyl Stearate CH ₃ (CH ₂) ₁₆ COO(CH ₂) ₃ CH ₃	--	---	---	---	73	---	---	---	---	---	---
Butynediol HOCH ₂ C≡CCH ₂ OH	--	---	---	---	73	---	---	---	---	---	---
Butyric Acid CH ₃ CH ₂ CH ₂ COOH	--	N	N	180	73	73	73	---	73	---	---
	20%	---	---	---	---	---	---	R to 212	---	---	---
	Liquid	---	---	---	---	---	---	R to 176	73	---	---
Cadmium Cyanide Cd(CN) ₂	--	---	180	---	140	---	---	---	---	---	---
Calcium Bisulfide Ca(HS) ₂ ·6H ₂ O	--	---	73	---	N	140	---	---	140	---	---
Calcium Bisulfite Ca(HSO ₃) ₂	--	---	180	180	140	N	140	---	N	---	---
	Sat'd	---	---	---	---	---	---	R to 248	---	---	---
Calcium Carbonate CaCO ₃	Sat'd	---	180	180	140	140	140	R to 248	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Calcium Chlorate Ca(ClO ₃) ₂ • 2H ₂ O	--	---	180	180	140	140	140	R to 248	140	---	---
Calcium Chloride CaCl ₂	5%	---	---	---	---	---	---	---	---	---	R to 176
	Sat'd	120	180	180	140	140	140	R to 248	R to 176	R to 194	---
Calcium Hydroxide Ca(OH) ₂	--	160	180	180	140	140	140	---	140	---	---
	2%	---	---	---	---	---	---	---	---	---	R to 73
	30%	---	---	---	---	R to 140	---	---	R to 140	---	---
Calcium Hypochlorite Ca(OCl) ₂	30%	160	180	140	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	C to 212	---	---	---
Calcium Nitrate Ca(NO ₃) ₂	--	----	180	180	140	140	140	---	140	---	---
	50%	-	---	---	---	140	---	R to 212	140	---	---
	Sat'd	---	---	---	---	---	---	R to 176	---	---	---
Calcium Oxide CaO	--	---	180	---	140	140	---	---	140	---	---
Calcium Sulfate CaSO ₄	--	100	180	180	140	140	140	R to 212	140	---	---
Calcium Hydrogen Sulfide Ca(HS) ₂	>10%	---	---	---	---	---	---	R to 248	---	---	---
Camphor C ₁₀ H ₁₆ O	--	N	---	73	73	73	---	---	73	---	---
Cane Sugar Liquors C ₁₂ H ₂₂ O ₁₁	--	---	180	180	140	140	150	---	140	---	---
Carbitol CH ₃ CH ₂ O(CH ₂) ₂ O(CH ₂) ₂ OH	--	---	N	---	73	---	---	---	---	---	---
Carbon Dioxide CO ₂	Dry	160	180	140	140	140	---	R to 212	140	---	---
	100%										
	Wet	160	180	140	140	140	140	---	140	---	---
Carbon Disulfide CS ₂	--	N	N	N	N	C to 140	---	---	R to 68	R to 104	---
Carbon Monoxide CO	Gas	---	180	180	140	140	140	R to 140	140	---	---
Carbon Tetrachloride CCl ₄	--	N	N	N	73	C to 73	N	C to 212	C to 68	N	R to 73

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Carbonic Acid H ₂ CO ₃	Sat'd	185	180	140	140	140	---	---	140	---	---
Castor Oil	--	---	C to 180	140	140	73	140	---	73	---	---
Caustic Potash KOH	50%	160	180	180	140	140	73	---	140	---	---
Caustic Soda (Sodium Hydroxide) NaOH	40%	160	180	180	140	140	73	---	140	---	---
Cellosolve	--	---	N	73	73	C to 120	140	---	C to 120	---	---
Cellosolve Acetate CH ₃ COOCH ₂ CH ₂ OC ₂ H ₅	--	---	N	73	73	---	---	---	---	---	---
Chloral Hydrate CCl ₃ CH (OH) ₂	All	---	180	C to 73	140	120	140	---	120	---	---
Chloramine NH ₂ Cl	Dilute	---	N	73	73	73	---	---	73	---	---
Chloric acid HClO ₃ •7H ₂ O	10%	---	180	73	140	73	---	---	73	---	---
	20%	---	185	73	140	73	---	---	73	---	---
Chlorine Gas Cl ₂	0-20 PPM moisture content	N	C to 73	N	C to 73	C to 73	---	R to 212	C to 73	---	---
	20-50 PPM moisture content	N	N	N	N	C to 73	---	---	C to 73	---	---
	50+ PPM moisture content	N	N	N	N	C to 73	---	N	C to 73	---	---
Chlorine	Liquid	N	N	N	N	N	---	---	N	---	N
Chlorinated Water											
	Sat'd	---	180	180	140	C to 120	140	R to 212	C to 120	---	---
Chloroacetic Acid CH ₂ ClCOOH	50%	N	180	C to 73	140	120	N	---	120	---	---
	>10%	---	---	---	---	---	---	R to 140	---	---	---
Chloroacetyl Chloride ClCH ₂ COCl	--	---	---	---	73	---	---	---	---	---	---
Chlorobenzene C ₆ H ₅ Cl	Dry	N	N	73	N	C to 75	N	---	C to 75	---	---
	Liquid	---	---	---	---	---	---	R to 140	R to 68	C to 176	---
Chlorobenzyl Chloride ClC ₆ H ₄ CH ₂ Cl	--	---	N	---	N	C to 120	---	---	C to 120	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Chloroethanol ClCH ₂ CH ₂ OH	Liquid	---	---	---	---	---	N	R to 122	---	---	---
Chloroform CHCl ₃	Dry	N	N	N	N	C to 75	C to 73	---	C to 75	---	---
	Liquid	---	---	---	---	---	---	R to 212	N	---	C to 73
Chloromethane CH ₃ Cl	Gas	---	---	---	---	---	---	R to 212	---	---	---
Chloropicrin CCl ₃ NO ₂	--	---	---	---	N	73	---	---	73	---	---
Chlorosulfonic Acid ClSO ₂ OH	--	----	73	N	73	C to 120	N	---	C to 120	---	---
	50%	-	---	---	---	---	---	R to 68	---	---	---
	100%	---	---	---	---	N	---	---	N	---	---
Chromic Acid H ₂ CrO ₄	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
	10%	73	180	140	140	73	140	R to 212	73	N	---
	20%	---	---	---	---	---	---	R to 212	---	---	---
	25%	---	---	---	---	---	---	R to 212	---	---	---
	30%	N	180	73	140	73	140	R to 212	73	---	---
	40%	N	180	73	140	73	73	R to 212	73	---	---
	50%	N	C to 140	73	N	73	N	R to 212	73	---	---
Chromium Potassium Sulfate CrK(SO ₄) ₂ •12H ₂ O	>10%	---	---	---	---	---	---	R to 212	---	----	---
	--	-	--	73	---	73	---	---	73	-	---
	Sat'd	---	---	---	---	---	R to 212	---	---	---	---
Citric Acid C ₆ H ₈ O ₇	Sat'd	160	180	140	140	140	140	R to 248	140	C to 140	---
Coconut Oil	--	---	C to 180	73	140	73	140	R to 248	73	---	---
Cod Liver Oil	Work Sol.	---	---	---	---	---	---	R to 248	---	---	---
Coffee	--	---	180	140	140	140	---	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Coke Oven Gas	--	---	---	73	140	140	---	---	140	---	---
Copper Acetate Cu(C ₂ H ₃ O ₂) ₂ •H ₂ O	Sat'd	---	73	73	73	---	---	---	---	---	---
Copper Carbonate CuCO ₃	Sat'd	---	180	---	140	140	---	---	140	---	---
Copper Chloride CuCl ₂	Sat'd	73	180	140	140	140	140	---	140	---	---
Copper Cyanide CuCN	Sat'd	---	180	---	140	140	140	R to 212	140	---	---
Copper Fluoride CuF ₂ •2H ₂ O	2%	---	180	73	140	140	140	---	140	---	---
Copper Nitrate Cu(NO ₃) ₂ •3H ₂ O	30%	---	180	140	140	140	140	---	---	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Copper Sulfate CuSO ₄ •5H ₂ O	Sat'd	120	180	120	140	140	140	R to 212	140	R to 194	---
Corn Oil	--	---	C to 180	73	140	120	---	---	120	---	---
Corn Syrup	--	---	185	140	140	140	---	---	140	---	---
Cottonseed Oil	--	120	C to 180	140	140	R to 140	140	---	R to 140	---	---
Creosote	--	---	N	73	N	140	---	---	140	---	---
Cresol CH ₃ C ₆ H ₄ OH	90%	N	N	R to 73	N	73	N	R to 68	73	---	---
Cresylic Acid	50%	---	180	---	140	C to 73	N	---	C to 73	---	---
Crotonaldehyde CH ₃ CH=CHCHO	--	---	N	C to 73	N	---	---	---	---	---	---
	Liquid	---	---	---	---	---	---	R to 104	--	---	---
Crude Oil	--	---	C to 180	140	140	C to 120	C to 73	R to 212	C to 120	R to 140	---
Cupric Chloride CuCl ₂ • 2H ₂ O	20%	---	---	---	---	---	---	---	---	---	R to 73
Cupric Fluoride CuF ₂	--	---	180	---	140	140	---	---	140	---	---
Cupric Sulfate CuSO ₄ • 5H ₂ O	Sat'd	100	180	73	140	140	---	---	---	---	---
Cuprous Chloride CuCl	Sat'd	70	180	---	140	140	---	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Cyclohexane C ₆ H ₁₂	--	73	N	N	N	N	---	R to 248	N	C to 140	---
Cyclohexanol C ₆ H ₁₁ OH	--	C to 120	N	140	N	73	C to 73	R to 104	73	---	---
Cyclohexanone C ₆ H ₁₀ O	Liquid	N	N	73	N	120	N	N	C to 176	C to 140	---
Detergents (Heavy Duty)	--	---	C to 180	180	140	R to 140	---	---	R to 140	---	R to 73
Dextrin (Starch Gum)	Sat'd	---	180	140	140	140	140	---	140	---	---
Dextrose C ₆ H ₁₂ O ₆	Sat'd	---	180	140	140	140	140	---	140	---	---
Diacetone Alcohol CH ₃ COCH ₂ C(CH ₃) ₂ OH	--	---	N	120	N	---	---	---	---	C to 140	---
Dibutoxyethyl Phthalate C ₂₀ H ₃₀ O ₆	--	---	N	---	N	---	---	---	---	---	---
n-Dibutyl Ether C ₄ H ₉ OC ₄ H ₉	--	---	---	---	---	73	---	---	73	---	---
Dibutyl Phthalate C ₆ H ₄ (COOC ₄ H ₉) ₂	--	N	N	73	N	73	---	---	73	---	---
Dibutyl Sebacate C ₄ H ₉ OCO(CH ₂) ₈ OCOC ₄ H ₉	--	---	---	73	73	73	---	---	73	---	---
Dichloroacetic Acid CHCl ₂ COOH	50%	---	---	---	---	---	---	R to 176	---	---	---
Dichlorobenzene C ₆ H ₄ Cl ₂	--	N	N	C to 73	N	C to 120	---	---	C to 120	---	R to 73
	Liquid	---	---	---	---	---	---	R to 140	---	---	---
Dichloroethylene C ₂ H ₂ Cl ₂	--	---	N	C to 73	N	C to 120	---	---	C to 120	---	---
	Liquid	---	---	---	---	---	---	R to 248	---	---	---
Diesel Fuels	--	---	C to 180	140	140	73	C to 73	R to 212	73	---	---
Diethanolamine (CH ₂ CH ₂ OH) ₂ NH	Solid	---	---	---	---	---	---	N	---	---	---
	20%	---	---	---	---	---	---	---	R to 194	---	---
Diethylamine C ₄ H ₁₀ NH	--	N	N	---	N	C to 120	N	N	C to 120	---	---
Diethyl Ether C ₄ H ₁₀ O	--	N	N	73	73	C to 140	---	---	C to 140	140	---
Diglycolic Acid O(CH ₂ COOH) ₂	Sat'd	---	180	140	140	140	140	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
	10%	---	---	---	---	---	---	R to 140	---	---	---
Dimethylamine (CH ₃) ₂ NH	--	---	---	73	140	73	N	N	73	---	---
Dimethylformamide HCON(CH ₃) ₂	--	N	N	180	N	120	---	---	120	---	C to 73
	Liquid	---	---	---	---	---	---	---	N	---	---
Dimethylhydrazine (CH ₃) ₂ NNH ₂	--	---	---	---	N	---	---	---	---	---	---
Dimethyl Phthalate C ₆ H ₄ (COOCH ₃) ₂	--	---	N	---	---	C to 73	---	---	C to 73	---	---
Diocetyl Phthalate C ₆ H ₄ (COOC ₈ H ₁₇) ₂	--	N	N	C to 73	N	73	C to 73	---	73	140	---
Dioxane C ₄ H ₈ O ₂	--	--	N	C to 140	N	140	---	---	140	---	---
	Liquid	---	---	---	---	---	---	C to 68	---	---	---
Diphenyl Oxide (C ₆ H ₅) ₂ O	Sat'd	---	---	---	---	73	---	---	73	---	---
Disodium Phosphate Na ₂ HPO ₄	--	---	180	140	140	140	140	---	140	---	---
Dishwashing Liquid (Cascade®)	--	---	---	---	---	---	---	---	---	---	R to 73
DOWTHERM A	--	---	---	---	N	---	---	---	---	---	---
Ethanol C ₂ H ₅ OH	40%	---	---	---	---	---	---	R to 68 R to 122	---	---	---
	95%	---	---	---	---	---	---	---	R to 140	-	---
	Liquid	---	---	---	---	---	---	R to 122	R to 140	---	R to 176
Ether ROR	--	N	N	C to 73	N	73	N	---	73	---	---
Ethyl Acetate CH ₃ COOCH ₂ CH ₃	--	N	N	C to 140	N	73	C to 73	---	73	140	R to 73 C to 176
	Liquid	---	---	---	---	---	---	C to 68	---	---	---
Ethyl Acetoacetate CH ₃ COCH ₂ COOC ₂ H ₅	--	N	N	---	N	---	---	---	---	---	---
Ethyl Acrylate CH ₂ =CHCOOC ₂ H ₅	--	---	N	---	N	---	---	---	---	---	---
Ethyl Alcohol (Ethanol) C ₂ H ₅ OH	--	---	C to 140	140	140	140	140	---	140	C to 104	R to 176

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Ethyl Benzene C ₆ H ₅ C ₂ H ₅	--	---	---	C to 73	N	C to 73	---	---	---	---	---
Ethyl Chloride C ₂ H ₅ Cl	Dry	---	N	C to 73	N	C to 73	---	---	C to 73	---	---
	Gas	---	---	---	---	---	---	R to 212	---	---	---
Ethyl Chloroacetate ClCH ₂ COOC ₂ H ₅	--	---	---	---	N	---	---	---	---	---	---
Ethyl Ether (C ₂ H ₅) ₂ O	Liquid	---	N	N	N	N	N	R to 122	R to 68	---	---
Ethylene Bromide BrCH ₂ CH ₂ Br	Dry	---	N	---	N	---	N	---	---	---	---
Ethylene Chloride (Vinyl Chloride) CH ₂ CHCl	Dry	N	N	C to 73	N	C to 140	---	---	C to 140	---	---
Ethylene Chlorohydrin ClCH ₂ CH ₂ OH	--	---	N	73	N	---	N	---	---	---	---
	Liquid	---	---	---	---	---	---	C to 68	---	---	---
Ethylene Diamine NH ₂ CH ₂ CH ₂ NH ₂	--	N	---	73	N	140	---	---	140	---	---
Ethylene Dichloride C ₂ H ₄ Cl ₂	Dry	N	N	C to 140	N	C to 73	140	---	C to 73	---	---
Ethylene Glycol OHCH ₂ CH ₂ OH	Liquid	73	C to 180	212	140	140	140	R to 212	R to 212	---	C to 176
Ethylene Oxide CH ₂ CH ₂ O	--	---	N	C to 73	N	73	---	---	73	C to 140	---
2-Ethylhexanol CH ₃ (CH ₂) ₃ CHC ₂ H ₅ CH ₂ OH	--	---	---	---	---	73	---	---	73	---	---
Fatty Acids R-COOH	--	160	73	120	140	120	150	---	120	194	---
Ferric Chloride (Aqueous) FeCl ₃	Sat'd	120	180	140	140	140	150	R to 212	140	---	---
Ferric Hydroxide Fe(OH) ₃	Sat'd	160	180	140	140	140	---	---	140	---	---
Ferric Nitrate Fe(NO ₃) ₃ • 9H ₂ O	Sat'd	160	180	140	140	140	140	R to 212	140	---	---
Ferric Sulfate Fe ₂ (SO ₄) ₃	--	160	180	140	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Ferrous Chloride FeCl ₂	Sat'd	160	180	140	140	140	140	R to 212	140	---	---
Ferrous Hydroxide Fe(OH) ₂	Sat'd	160	180	140	140	140	---	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Ferrous Nitrate Fe(NO ₃) ₂	--	160	180	140	140	140	---	---	140	---	---
Ferrous Sulfate FeSO ₄	--	160	180	140	140	140	140	---	140	---	---
	20%	---	---	---	---	---	---	---	---	---	R to 73
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Ferrous Chloride FeCl ₂	Sat'd	160	180	140	140	140	140	R to 212	140	---	---
Fish Oil	---	---	180	180	140	140	140	---	140	---	---
Fluoroboric Acid HBF ₄	---	73	73	140	140	140	---	---	140	---	---
	Solid	---	---	---	---	---	---	R to 104	---	---	---
Fluorine Gas (Dry) F ₂	100%	---	73	N	73	C to 73	C to 73	---	C to 73	N	---
Fluorine Gas (Wet) F ₂	--	N	73	N	73	N	N	---	N	N	---
Fluorosilicic Acid H ₂ SiF ₆	25%	---	---	---	---	---	---	R to 212	---	---	---
	30%	---	R to 140	140	140	140	---	R to 212	---	---	---
	40%	---	---	---	---	---	---	R to 140	---	---	---
	50%	---	73	73	140	140	140	R to 212	---	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Formaldehyde HCHO	Dilute	160	73	140	140	140	140	R to 176	---	C to 104	---
	35%	160	C to 73	140	140	140	140	---	140	---	---
	37%	160	C to 73	140	140	140	140	R to 212	140	---	---
	50%	---	C to 73	---	140	140	140	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Formic Acid HCOOH	--	N	C to 73	140	73	140	150	---	140	---	---
	10%	---	---	---	---	---	---	R to 212	R to 140	N	N
	40%	---	---	---	---	---	---	R to 212	R to 140	---	---
	50%	---	---	---	---	---	---	R to 176	R to 140	---	---
	85%	---	---	---	---	---	---	R to 212	---	---	---
	100%	---	---	---	---	140	---	---	140	---	---
Freon 11 CCl ₃ F	100%	N	73	N	140	73	---	---	73	---	---
Freon 12 CCl ₂ F ₂	100%	---	73	73	140	73	---	---	73	68	---
	Work. Sol.	---	---	---	---	---	---	R to 212	R to 68	---	---
Freon 21 CHCl ₂ F	100%	---	---	N	N	C to 120	---	---	C to 120	---	---
Freon 22 CHClF ₂	100%	---	73	73	N	C to 120	---	---	C to 120	68	---
Freon 113 C ₂ Cl ₂ F ₃	100%	---	---	N	140	73	---	---	73	---	---
Freon 114 C ₂ Cl ₂ F ₄	100%	---	---	N	140	73	---	---	73	---	---
Fructose C ₆ H ₁₂ O ₆	Sat'd	73	180	180	140	140	140	---	140	---	---
Fruit Juice	Work. Sol.	---	---	---	---	---	---	R to 212	---	104	---
Furfural C ₄ H ₃ OCHO	100%	N	N	N	N	C to 140	---	---	C to 140	C to 140	---
Gallic Acid C ₆ H ₂ (OH) ₃ CO ₂ H • H ₂ O	--	---	73	---	140	73	---	---	73	---	---
Gasoline, Leaded*	--	N	N	N	140	73	N	---	73	---	---
Gasoline, Unleaded*	--	N	N	N	140	73	N	---	73	---	R to 176
Gasoline (Fuel)	--	---	---	---	---	---	---	R to 212	---	R to 160	---
Gasohol*	--	N	N	N	140	73	N	---	73	---	---
Gasoline, Sour*	--	N	N	N	140	C to 73	N	---	C to 73	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Gelatin	--	---	180	180	140	140	140	---	140	---	---
Glucose C ₆ H ₁₂ O ₆ • H ₂ O	--	120	180	212	140	140	140	---	140	---	---
	10%	---	---	---	---	---	---	R to 248	---	---	---
Glue	--	---	---	140	140	140	---	---	140	---	---
Glycerine C ₃ H ₅ (OH) ₃	--	140	180	212	140	140	140	---	140	---	---
	Liquid	---	---	---	---	---	---	R to 248	---	---	---
Glycol OHCH ₂ CH ₂ OH	--	---	C to 180	212	140	140	---	---	140	C to 140	---
Glycolic Acid OHCH ₂ COOH	Sat'd	---	180	73	140	140	---	---	140	---	---
	10%	---	---	---	---	---	---	R to 212	---	---	---
	30%	---	---	---	---	---	---	R to 140	---	---	---
	65%	---	---	---	---	---	---	R to 212	---	---	---
Glyoxal OCHCHO	--	---	---	---	---	140	---	---	140	---	---
Grape Sugar	--	---	180	---	140	---	---	---	---	---	---
Grapefruit Juice	Work. Sol.	---	---	---	---	---	---	R to 122	---	---	---
Grease	--	---	---	---	---	---	---	---	---	194	---
Green Liquor	--	160	180	---	140	---	140	---	---	---	---
Heptane (Type 1) C ₇ H ₁₆	--	73	180	N	140	73	N	---	73	---	---
	Liquid	---	---	---	---	---	---	R to 212	C to 176	---	---
n-Hexane C ₆ H ₁₄	--	C	73	73	73	---	---	---	---	---	---
	Liquid	---	---	---	---	---	---	R to 176	---	---	R to 73
Hexanol, Tertiary Type I CH ₃ (CH ₂) ₄ CH ₂ OH	--	---	180	---	140	140	140	---	140	---	---
Hydraulic Oil (Petroleum)	--	---	---	---	73	73	---	---	73	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Hydrazine H ₂ NNH ₂	--	---	N	73	N	---	---	---	---	---	---
Hydrobromic Acid HBr	20%	73	73	140	140	140	140	R to 212	140	---	---
	50%	N	---	120	---	140	---	R to 140	140	---	---
	66%	---	---	---	---	---	---	R to 212	---	---	---
Hydrochloric Acid HCl	1%	---	---	---	---	---	---	---	---	---	R to 176
	10%	C to 120	180	140	140	140	140	R to 212	R to 212	C to 104	N
	20%	---	---	---	---	---	---	R to 212	R to 212	---	---
	30%	C to 73	180	140	140	140	140	R to 212	R to 140	---	---
	Conc.	---	---	---	---	---	---	---	R to 140	---	---
Hydrocyanic Acid HCN	--	160	180	73	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	R to 248	---	---	---
	10%	---	---	---	---	---	---	R to 248	---	---	---
Hydrofluoric Acid HF	Dilute	73	73	180	73	140	140 140	R to 212	140	---	---
	30%	N	73	140	73	140	---	---	140	---	---
	40%	---	---	---	---	---	---	R to 212	---	---	---
	50%	N	N	73	73	120 140	140	R to 212	120	---	---
	60%	---	---	---	---	---	---	R to 140	140	---	---
	70%	---	---	---	---	---	---	R to 212	---	---	---
	100%	N	N	C to 73	N	---	---	---	120	---	---
	Gas	---	---	---	---	---	---	R to 104	---	---	---
Hydrogen H ₂	Gas	---	73	140	140	140	140	R to 248	140	194	---
Hydrogen Cyanide HCN	--	---	---	73	140	---	---	---	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Hydrogen Fluoride, Anhydrous HF	--	---	C	73	N	---	---	---	---	---	---
Hydrogen Peroxide H ₂ O ₂	3%	---	---	---	---	---	---	---	---	---	R to 73
	10%	---	---	---	---	---	---	R to 212	---	---	---
	30%	---	---	---	---	---	---	R to 212	---	C to 104	---
	50%	---	180	73	140	140	N	R to 212	140	---	---
	90%	---	180	C to 73	140	73	N	---	73	---	---
Hydrogen Phosphide (Type I) PH ₃	--	---	73	---	140	140	140	---	140	---	---
Hydrogen Sulfide H ₂ S	Dry	---	180	150	140	140	140	R to 248	140	---	---
	Wet	---	180	---	140	140	---	---	140	---	---
Hydrogen Sulfite H ₂ SO ₃	10%	---	---	---	---	140	---	R to 248	140	---	---
Hydroquinone C ₆ H ₄ (OH) ₂	Sat'd	---	180	---	140	140	140	---	---	140	---
Hydroxylamine Sulfate (NH ₂ OH)OHSO ₄	--	---	180	---	140	140	---	---	140	---	---
Hypochlorous Acid HOCl	10%	73	180	73	140	140	140	---	140	---	---
	70%	---	---	---	---	---	---	R to 212	---	---	---
Inks	--	---	---	140	---	140	---	---	140	---	---
Iodine I ₂	10%	N	73	73	N	C to 120	N	R to 176	C to 120	---	---
Isobutyl Alcohol (CH ₃) ₂ CHCH ₂ OH	--	C to 73	C to 73	73	---	140	---	---	140	---	---
Isooctane (CH ₃) ₃ CCH ₂ CH(CH ₃) ₂	--	---	---	C to 73	---	73	---	---	73	---	---
	Liquid	---	---	---	---	---	---	R to 212	---	---	---
Isopropyl Acetate CH ₃ COOCH(CH ₃) ₂	--	N	N	---	---	73	---	---	73	---	---
Isopropyl Alcohol (CH ₃) ₂ CHOH	--	---	C to 180	212	140	140	140	C to 212	140	---	R to 73
Isopropyl Ether (CH ₃) ₂ CHOCH(CH ₃) ₂	--	---	N	C to 73	N	73	---	---	73	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
JP-4 Fuel*	--	---	C to 73	C to 73	140	73	---	---	73	---	---
JP-5 Fuel*	--	---	C to 73	C to 73	140	73	---	---	73	---	---
Kerosene*	--	73	73	C to 140	140	C to 140	C to 73	---	C to 140	---	---
Ketchup	--	---	---	---	73	---	---	---	---	---	---
Ketones	--	N	N	C to 73	N	73	---	---	73	---	---
	Work Sol	---	---	---	---	---	---	---	R to 302	---	---
Kraft Liquors	--	73	180	---	140	120	140	---	120	---	---
Lactic Acid CH ₃ CHOHCOOH	10%	---	---	---	---	---	---	R to 140	---	---	---
	20%	---	---	---	---	---	---	---	---	---	R to 73
	25%	73	180	212	140	140	140	---	140	---	---
	80%	N	C to 180	140	73	140	---	---	140	---	---
	Liquid	---	---	---	---	---	---	R to 212	---	R to 194	---
Lard Oil	--	---	C to 180	---	140	C to 120	73	---	C to 120	---	---
Latex	--	---	---	140	---	140	---	---	140	---	---
Lauric Acid CH ₃ (CH ₂) ₁₀ COOH	--	---	180	140	140	120	---	---	120	---	---
Lauryl Chloride (Type I) CH ₃ (CH ₂) ₁₀ CH ₂ Cl	--	---	73	---	140	120	73	R to 248	120	---	---
Lead Acetate Pb(C ₂ H ₃ COO) ₂ · 3H ₂ O	Sat'd	---	180	180	140	140	140	R to 212	140	---	---
Lead Chloride PbCl ₂	--	---	180	140	140	120	---	---	120	---	---
Lead Nitrate Pb(NO ₃) ₂	Sat'd	---	180	140	140	120	---	---	120	---	---
Lead Sulfate PbSO ₄	--	---	180	140	140	120	---	---	120	---	---
Lead Tetraethyl C ₈ H ₂₀ Pb	--	---	---	---	---	---	---	R to 212	---	---	---
Lemon Oil	--	---	N	C to 73	---	---	---	---	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Lemon Juice	--	---	---	---	---	C to 140	---	---	C to 140	---	---
Ligroin	--	---	---	140	---	---	---	---	---	---	---
Lime Slurry	--	---	---	---	---	140	---	---	140	---	---
Lime Sulfur	--	---	73	73	73	120	140	---	120	---	---
Linoleic Acid CH ₃ (CH ₂) ₄ (CH=CHCH ₂) ₂ (CH ₂) ₆ COOH	--	---	180	180	140	---	73	---	---	---	---
Linoleic Oil (Type I)	--	---	---	---	140	---	73	---	---	---	---
Linseed Oil	--	73	C to 180	140	140	R to 73	73	R to 248	R to 73	194	---
Liqueurs	--	---	---	140	140	120	140	---	120	---	---
Lithium Bromide LiBr	--	---	---	140	140	140	---	---	140	---	---
Lithium Chloride LiCl	--	---	---	140	140	120	---	---	120	---	---
Lithium Hydroxide LiOH	--	---	---	140	---	120	---	---	120	---	---
Lubricating Oil (ASTM #1)	--	---	180	C to 140	140	73	140	R to 248	73	---	---
Lubricating Oil (ASTM #2)	--	---	180	C to 140	140	73	140	---	73	---	---
Lubricating Oil (ASTM #3)	--	---	180	C to 140	140	73	140	---	73	---	---
Magnesium Carbonate MgCO ₃	--	120	180	212	140	140	140	R to 212	140	---	---
Magnesium Chloride MgCl ₂	Sat'd	120	180	140	140	140	140	R to 140	140	---	---
	50%	---	---	---	---	---	---	R to 212	---	194	---
Magnesium Citrate MgHC ₆ H ₅ O ₇ ·o5H ₂ O	--	---	180	---	140	140	---	---	140	---	---
Magnesium Hydroxide Mg(OH) ₂	Sat'd	160	180	180	140	140	140	R to 212	140	---	---
Magnesium Nitrate Mg(NO ₃) ₂ ·o2H ₂ O	--	160	180	212	140	140	140	R to 248	140	---	---
Magnesium Oxide MgO	--	160	---	---	---	---	---	---	---	---	---
Magnesium Sulfate MgSO ₄ ·o7H ₂ O	--	160	180	212	140	140	140	R to 212	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Maleic Acid HOOCCH=CHCOOH	Sat'd	160	180	140	140	140	140	R to 140	140	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
	10%	---	---	---	---	---	---	R to 140	---	---	---
Malic Acid COOHCH ₂ CH(OH)COOH	--	---	180	140	140	140	140	---	140	---	---
Manganese Sulfate MnSO ₄ • 4H ₂ O	--	---	180	180	140	140	---	---	140	---	---
Margarine	Work Sol.	---	---	---	---	---	---	R to 248	---	---	---
Mercuric Chloride HgCl ₂	--	---	180	180	140	140	140	---	140	---	---
	Sat'd	--	---	---	---	---	---	R to 212	---	---	---
Mercuric Cyanide Hg(CN) ₂	Sat'd	---	180	140	140	140	140	R to 212	140	---	---
Mercuric Sulfate HgSO ₄	Sat'd	---	180	140	140	140	---	---	140	---	---
Mercurous Nitrate HgNO ₃ • 2H ₂ O	Sat'd	---	180	140	140	140	140	---	140	---	---
	10%	---	---	---	---	---	---	R to 212	---	---	---
Mercury Hg	Liquid	---	180	140	140	140	140	R to 248	140	194	---
Methane CH ₄	--	N	73	73	140	140	---	---	140	140	---
Methanol (Methyl Alcohol) CH ₃ OH	--	---	N	180	140	R to 140	140	---	R to 140	---	---
	5%	-	---	---	---	---	---	R to 140	---	---	---
	Liquid	---	---	---	---	---	---	C to 176	R to 140	---	R to 176
Methoxyethyl Oleate CH ₃ OCH ₂ CH ₂ OOCC ₁₇ H ₃₃	--	---	---	---	73	---	---	---	---	---	---
Methyl Acetate CH ₃ CO ₂ CH ₃	--	N	N	140	N	C to 120	---	---	C to 120	---	---
Methyl Acrylate CH ₂ =CHCOOCH ₃	Tech Pure	---	---	---	---	140	---	---	140	---	---
Methyl Amine CH ₃ NH ₂	--	---	N	N	N	---	---	---	---	---	---
Methyl Bromide CH ₃ Br	--	---	N	N	N	C to 73	---	---	C to 73	R to 68	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Methyl Butyl Ketone CH ₃ CO(CH ₂) ₃ CH ₃	Liquid	---	---	---	---	---	---	C to 122	---	---	---
Methyl Cellosolve HOCH ₂ CH ₂ OCH ₃	--	---	N	73	N	C to 120	---	---	C to 120	---	---
Methyl Chloride CH ₃ Cl	Dry	N	N	N	N	C to 120	N	---	C to 120	R to 68	---
Methyl Chloroform CH ₃ CCl ₃	--	N	N	C to 73	N	C to 120	---	---	C to 120	---	---
Methyl Ethyl Ketone (MEK) CH ₃ COC ₂ H ₅	100%	N	N	73	N	N	73	C to 68	R to 140	C to 140	R to 73 C to 176
Methyl Isobutyl Carbinol (CH ₃) ₂ CHCH ₂ CH(CH ₃)OH	--	---	N	---	N	---	---	---	---	---	---
Methyl Isobutyl Ketone (CH ₃) ₂ CHCH ₂ COCH ₃	--	N	N	73	N	73	---	---	73	---	---
Methyl Isopropyl Ketone CH ₃ COCH(CH ₃) ₂	--	---	N	---	N	73	---	---	73	---	---
Methyl Methacrylate CH ₂ =C(CH ₃)COOCH ₃	--	---	N	---	73	140	---	R to 68	140	---	---
Methyl Sulfate (CH ₃) ₂ SO ₄	--	---	73	C to 73	73	140	---	---	---	68	---
Methylene Bromide CH ₂ Br ₂	--	---	N	N	N	C to 120	---	---	C to 120	---	---
Methylene Chloride CH ₂ Cl ₂	100%	---	N	N	N	N	73	C to 104	N	---	C to 176
Methylene Chlorobromide CH ₂ ClBr	--	---	N	--	N	---	---	---	---	---	---
Methylene Iodide CH ₂ I ₂	--	---	N	N	N	C to 120	---	---	C to 120	---	---
Methylsulfuric Acid CH ₃ HSO ₄	--	---	180	140	140	---	---	---	---	---	---
Milk	--	160	180	212	140	140	140	R to 212	140	194	---
Mineral Oil	--	73	180	C to 140	140	R to 73	C to 73	R to 212	C to 176	---	---
Molasses	--	---	180	140	140	140	140	---	140	---	---
Monochloroacetic Acid CH ₂ ClCOOH	50%	---	---	140	140	140	---	---	140	---	---
Monochlorobenzene C ₆ H ₅ Cl	Tech Pure	---	N	73	N	C to 120	---	---	C to 120	---	---
Monoethanolamine HOCH ₂ CH ₂ NH ₂	--	---	---	---	N	---	---	---	---	---	---
Motor Oil	--	---	180	C to 140	140	R to 140	---	---	R to 140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Morpholine C ₄ H ₈ ONH	--	---	---	140	---	140	---	---	140	---	---
Mustard, Aqueous	Work. Sol.	---	---	---	---	---	---	R to 248	---	---	---
N-methyl Pyrrolidone C ₅ H ₉ NO	100%	---	---	---	---	---	---	---	---	---	C to 73
Naphtha	--	---	73	73	140	73	73	R to 122	C to 176	R to 140	---
Naphthalene C ₁₀ H ₈	--	---	N	73	N	73	73	---	73	R to 194	---
Natural Gas	--	73	---	73	140	140	73	---	140	---	---
Nickel Acetate Ni(OOCCH ₃) ₂ • 4H ₂ O	--	---	---	73	---	140	---	---	140	---	---
Nickel Chloride NiCl ₂	Sat'd	160	180	180	140	140	140	R to 212	140	---	---
Nickel Nitrate Ni(NO ₃) ₂ • 6H ₂ O	Sat'd	160	180	180	140	140	140	R to 248	140	---	---
Nickel Sulfate NiSO ₄	Sat'd	160	180	180	140	140	140	R to 212	140	---	---
Nicotine C ₁₀ H ₁₄ N ₂	--	---	180	---	140	140	140	---	140	---	---
Nicotinic Acid C ₅ H ₄ NCOOH	--	---	180	---	140	140	140	R to 212	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Nitric Acid HNO ₃	5%	---	---	---	---	---	---	R to 176	C to 140	N	---
	10%	C to 73	180	180	140	73	C to 73	R to 212	C to 140	---	---
	20%	---	---	---	---	---	---	R to 212	C to 140	---	---
	25%	---	---	---	---	---	---	R to 212	C to 140	---	---
	30%	N	R to 130	140	140	73	N	R to 212	C to 140	---	---
	35%	---	---	---	---	---	---	---	C to 140	---	---
	40%	N	R to 120	73	140 100	73	N	C to 248	140 140	---	---
	50%	N	110	N	---	C to 73	N	---	---	---	---
	65%	---	---	---	73	---	---	C to 248	C to 73	---	---
	70%	N	100	N	---	C to 73	N	---	---	---	---
	85%	---	---	---	---	---	---	N	---	---	---
	95%	---	---	---	---	---	N	---	---	---	---
	100%	N	N	N	N	N	N	---	N	---	---
Nitrobenzene C ₆ H ₅ NO ₂	100%	N	N	C to 140	N	N	---	R to 122	N	---	---
Nitroglycerine CH ₂ NO ₃ CHNO ₃ CH ₂ NO ₃	--	---	---	---	N	73	---	---	73	---	---
Nitroglycol NO ₃ (CH ₂) ₂ NO ₃	--	---	---	---	N	---	---	---	---	---	---
Nitrous Acid HNO ₂	10%	---	180	C to 73	140	73	---	---	73	---	---
Nitrous Oxide N ₂ O	--	---	73	73	73	73	---	---	73	---	---
n-Octane C ₈ H ₁₈	--	---	C to 73	---	---	---	---	---	---	---	---
Oleic Acid CH ₃ (CH ₂) ₇ CH=CH(CH ₂) ₇ COOH	--	160	180	73	140	C to 140	150	R to 248	C to 140	R to 140	---
Oleum x H₂ SO ₄ oySO ₃	--	N	N	N	N	N	N	N	N	---	---
Olive Oil	--	160	C to 180	73	140	140	---	R to 248	R to 68	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Oxalic Acid HOOC(=O)H ₂ O	50%	160	180	140	140	140	140	---	140	---	---
	10%	---	---	---	---	---	---	R to 140	---	R to 140	---
	Sat'd	---	---	---	---	---	---	R to 122	---	---	---
Oxygen Gas O ₂	--	160	180	N	140	140	---	R to 212	140	R to 140	---
Ozone O ₃	--	---	180	C to 73	140	C to 120	---	---	C to 120	C to 68	---
	Sat'd	---	---	---	---	---	---	R to 68	---	---	---
Palm Oil	--	---	---	73	---	140	---	---	140	---	---
Palmitic Acid CH ₃ (CH ₂) ₁₄ COOH	10%	73	73	180	140	120	150	---	120	---	---
	70%	---	73	180	73	120	---	---	120	---	---
Paraffin C ₃₆ H ₇₄	--	73	180	140	140	C to 140	---	R to 212	C to 140	---	---
Peanut Oil	--	---	C to 180	140	---	---	---	R to 248	---	---	---
n-Pentane CH ₃ (CH ₂) ₃ CH ₃	--	N	C to 180	N	C to 140	C to 120	---	---	C to 120	---	--
Peracetic Acid CH ₃ COOOH	40%	N	---	73	73	---	---	---	---	---	---
Perchloric Acid (Type I) HClO ₄	10%	---	---	---	---	---	---	R to 212	---	---	---
	20%	---	---	---	---	---	---	R to 212	---	---	---
	15%	---	180	140	73	140	C to 73	---	140	---	---
	70%	73	180	C to 73	73	73	N	R to 212	73	---	---
Perchloroethylene (tetrachloroethylene) Cl ₂ C=CCl ₂	--	N	N	C to 73	C to 140	C to 120	---	C to 212	C to 120	C to 68	---
Perphosphate	--	---	73	140	73	---	---	---	---	---	---
Petroleum Ether	--	---	---	---	---	---	---	R to 212	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Phenol C ₆ H ₅ OH	--	N	73	73	73	140	73	---	140	N	---
	5%	---	---	---	---	---	---	---	R to 248	---	---
	50%	---	---	---	---	---	---	R to 176	---	---	---
	90%	---	---	---	---	R to 140	---	---	R to 140	---	---
	Solid	---	---	---	---	---	---	C to 122	---	---	---
Phenylhydrazine C ₆ H ₅ NHNH ₂	--	---	N	N	N	C to 120	---	R to 104	C to 120	---	---
Phenylhydrazine Hydrochloride C ₆ H ₅ NHNH ₂ ·HCl	10%	---	---	---	---	---	---	R to 140	---	---	---
Phosphine PH ₃	Gas	---	---	---	---	---	---	R to 104	---	---	---
Phosphoric Acid H ₃ PO ₄	10%	---	180	212	140	140	140	---	140 140	---	---
	50%	73	180	212	140	140	73	R to 212	---	C to 104	---
	75%	---	---	---	---	---	---	R to 212	73	---	---
	85%	---	180	212	140	73	---	C to 284	---	---	---
	98%	---	---	---	---	---	---	R to 212	---	---	---
Phosphoric Anhydride P ₂ O ₅	--	---	73	73	73	---	---	---	---	---	---
Phosphorous (Red)	--	---	---	---	73	140	---	---	140	---	---
Phosphorous (Yellow)	--	---	---	---	73	140	---	---	140	---	---
Phosphorus Oxychloride POCl ₃	Liquid	---	---	---	---	---	---	R to 68	---	---	---
Phosphorus Pentoxide P ₂ O ₅	--	---	73	73	73	140	---	---	140	---	---
Phosphorus Trichloride PCl ₃	--	--	N	73	N	120	C to 73	C to 122	120	---	---
Photographic Solutions	--	---	180	140	140	140	140	---	140	---	---
Phthalic Acid C ₆ H ₄ (COOH) ₂	--	---	---	140	C to 140	140	---	---	140	---	---
	Susp.	---	---	---	---	---	---	R to 212	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Picric Acid C ₆ H ₂ (NO ₂) ₃ OH	10%	N	N	73	N	73	73	R to 212	73	C to 68	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
	Sat'd.	---	---	---	---	---	---	R to 212	---	---	---
Pine Oil	--	---	N	140	---	R to 73	---	---	R to 73	---	---
Plating Solutions (Brass)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Cadmium)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Chrome)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Copper)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Gold)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Lead)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Nickel)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Rhodium)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Silver)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Tin)	--	---	180	140	140	140	C to 73	---	140	---	---
Plating Solutions (Zinc)	--	---	180	140	140	140	C to 73	---	140	---	---
Potash (Aq) KOH	Sat'd	---	180	---	140	140	---	---	140	---	---
Potassium Alum AlK (SO ₄) ₂ o12H ₂ O	--	---	180	---	140	140	---	---	140	---	---
Potassium Aluminum Sulfate AlK (SO ₄) ₂ o12H ₂ O	--	---	180	180	140	---	C to 73	---	---	---	---
Potassium Amyl Xanthate CH ₃ (CH ₂) ₄ OC(=S)-S.K	--	---	---	---	73	---	---	---	---	---	---
Potassium Bicarbonate KHCO ₃	Sat'd	---	180	140	140	140	140	R to 212	140	---	---
Potassium Bi- chromate K ₂ Cr ₂ O ₇	Sat'd	---	180	140	140	---	C to 73	R to 212	---	---	---
	40%	---	---	---	---	---	---	R to 212	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Potassium Bisulfate KHSO ₄	--	---	180	212	140	140	---	R to 212	140	---	---
Potassium Borate K ₂ B ₄ O ₇ o4H ₂ O	--	--	180	140	140	140	140	R to 212	140	---	---
Potassium Bromate KBrO ₃	--	---	180	212	140	140	140	R to 212	140	---	---
	10%	---	---	---	---	---	---	---	R to 212	---	---
Potassium Bromide KBr	--	---	180	212	140	140	140	R to 248	140	---	---
Potassium Carbonate K ₂ CO ₃	--	73	180	180	140	140	140	N	140	---	---
Potassium Chlorate (Aqueous) KClO ₃	--	160	180	212	140	140	140	N	140	---	---
Potassium Chloride KCl	--	160	180	212	140	140	140	R to 212	140	---	---
Potassium Chromate K ₂ CrO ₄	--	---	180	212	140	140	140	---	140	---	---
Potassium Cyanide KCN	--	---	180	180	140	140	140	R to 212	140	---	---
Potassium Dichromate K ₂ Cr ₂ O ₇	Sat'd	--	180	180	140	140	140	---	140	---	---
Potassium Ethyl Xanthate KS ₂ COC ₂ H ₅	--	---	---	---	73	---	---	---	---	---	---
Potassium Ferricyanide K ₃ Fe(CN) ₆	--	---	180	180	140	140	140	R to 248	140	---	---
Potassium Ferrocyanide K ₄ Fe(CN) ₆ o3H ₂ O	--	---	180	180	140	140	---	R to 248	140	---	---
Potassium Fluoride KF	--	---	180	180	140	140	140	R to 212	140	---	---
Potassium Hydroxide KOH	4%	---	---	---	---	---	---	C to 104	---	---	---
	10%	---	---	---	---	---	---	R to 176	---	---	---
	20%	---	---	---	---	---	---	R to 176	---	---	---
	25%	160	180	212	140	R to 140	140	---	R to 140	---	---
	45%	---	---	---	---	---	---	---	---	---	R to 73
	50%	---	---	---	---	---	---	R to 176	---	C to 104	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Potassium hydrogen Sulfite KHSO ₃	10%	---	---	---	---	---	---	R to 140	---	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Potassium Hypochlorite KClO	--	160	180	---	140	120	---	---	120	---	---
	3%	---	---	---	---	---	---	R to 212	---	---	---
Potassium Iodide KI	--	---	180	73	73	140	---	R to 212	140	---	---
Potassium Nitrate KNO ₃	--	160	180	140	140	140	140	---	140	C to 104	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Potassium Orthophosphate H ₂ KPO ₄	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Potassium Perborate KBO ₃	--	---	180	140	140	140	140	---	140	---	---
Potassium Perchlorate KClO ₄	--	---	180	140	140	140	140	---	140	---	---
Potassium Permanganate KMnO ₄	10%	---	180	73	140	140	140	R to 176	140	---	---
	20%	---	---	---	---	---	---	R to 212	---	---	---
	25%	---	180	73	73	140	---	---	140	---	---
	30%	---	---	---	---	---	---	R to 212	---	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Potassium Persulfate K ₂ S ₂ O ₈	--	---	180	140	140	140	140	R to 176	140	---	---
Potassium Sulfate K ₂ SO ₄	--	160	180	180	140	140	140	R to 212	140	194	---
Potassium Sulfide K ₂ S	--	---	180	140	---	140	140	68	140	---	---
Potassium Sulfite K ₂ SO ₃ o2H ₂ O	--	---	180	140	---	140	---	---	140	---	---
Propane C ₃ H ₈	--	---	73	73	140	140	73	R to 248	140	140	---
Propargyl Alcohol HC≡CCH ₂ OH	--	---	C to 180	140	140	140	140	---	140	---	---
Propionic Acid CH ₃ CH ₂ CO ₂ H	--	N	N	140	---	140	---	R to 140	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Propyl Alcohol (Type I) CH ₃ CH ₂ CH ₂ OH	--	73	C to 73	140	140	R to 140	140	R to 122	R to 140	---	---
Propylene Carbonate C ₄ H ₆ O ₃	100%	---	---	---	---	---	---	---	---	---	R to 73
Propylene Dichloride CH ₃ CHClCH ₂ Cl	100%	---	N	N	N	N	---	---	N	---	---
Propylene Oxide CH ₃ CHCH ₂ O	--	---	N	73	N	140	---	---	140	---	---
Pyridine N(CH) ₄ CH	--	---	N	C to 140	N	73	---	R to 68	73	C to 68	---
Pyrogallic Acid C ₆ H ₃ (OH) ₃	--	---	---	---	73	--	--	---	---	---	---
Quinone C ₆ H ₄ O ₂	--	---	---	140	---	140	---	---	140	---	---
Rayon Coagulating Bath	--	---	180	---	140	140	140	---	140	---	---
Salicylaldehyde C ₆ H ₄ OHCHO	--	---	---	73	N	120	---	---	120	---	---
Salicylic Acid C ₆ H ₄ (OH)(COOH)	--	---	---	140	140	140	---	R to 212	140	---	---
Selenic Acid Aq. H ₂ SeO ₄	--	---	180	---	140	140	140	---	140	---	---
Silicic Acid SiO ₂ on H ₂ O	--	---	180	140	140	140	140	R to 212	140	---	---
Silicone Oil	--	---	180	212	73	73	---	---	73	---	---
Silver Acetate AgCH ₃ COO	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Silver Chloride AgCl	--	160	180	140	140	---	---	---	---	---	---
Silver Cyanide AgCN	--	---	180	180	140	140	140	R to 212	140	---	---
Silver Nitrate AgNO ₃	--	160	180	180	140	R to 140	C to 73	---	R to 140	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Silver Sulfate Ag ₂ SO ₄	--	160	180	140	140	140	C to 73	---	140	---	---
Soaps	--	73	180	140	140	R to 140	140	---	R to 140	---	---
Sodium Acetate CH ₃ COONa	Sat'd	---	180	212	140	140	140	R to 212	140	---	---
Sodium Alum AlNa(SO ₄) ₂ o12H ₂ O	--	---	180	---	140	---	---	---	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Sodium Aluminate Na ₂ Al ₂ O ₄	Sat'd	---	---	---	140	---	---	---	---	---	---
Sodium Benzoate C ₆ H ₅ COONa	--	----	180	140	140	140	140	---	140	---	---
	35%	-	---	---	---	---	---	R to 68	---	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Sodium Bicarbonate NaHCO ₃	--	73	180	212	140	140	140	R to 212	140	---	---
Sodium Bisulfate NaHSO ₄	--	73	180	140	140	140	140	---	140	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Sodium Bisulfite NaHSO ₃	--	---	180	140	140	140	---	---	140	---	---
Sodium Borate (Borax) Na ₂ B ₄ O ₇ o10H ₂ O	Sat'd	160	180	180	140	140	140	---	140	---	---
Sodium Bromide NaBr	Sat'd	120	180	140	140	140	140	---	140	---	---
	50%	---	---	---	---	---	---	R to 248	---	---	---
Sodium Carbonate Na ₂ CO ₃	--	73	180	212	140	140	140	N	140	R to 140	---
Sodium Chlorate NaClO ₃	Sat'd	---	180	140	73	140	140	N	140	---	---
Sodium Chloride NaCl	---	120	180	212	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	194	---
	10%	---	---	---	---	---	---	R to 212	---	---	R to 176
Sodium Chlorite NaClO ₂	25%	---	180	73	N	140	---	---	140	---	---
Sodium Chromate Na ₂ CrO ₄ o4H ₂ O	--	120	180	140	---	140	---	R to 176	140	---	---
Sodium Cyanide NaCN	--	---	180	180	140	140	140	R to 212	140	---	---
Sodium Dichromate Na ₂ Cr ₂ O ₇ o2H ₂ O	Sat'd	----	180	---	140	---	---	----	---	----	---
	20%	-	180	180	140	140	140	-	140	-	---
	50%	---	---	---	---	---	---	R to 212	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Sodium Ferricyanide Na ₃ Fe(CN) ₆ o2H ₂ O	Sat'd	---	180	140	140	140	140	---	140	---	---
Sodium Ferrocyanide Na ₃ Fe(CN) ₆ o10H ₂ O	Sat'd	---	180	140	140	140	140	---	140	---	---
Sodium Fluoride NaF	--	120	180	180	140	140	140	R to 212	140	---	---
Sodium Hydrogen Sulfite NaHSO ₃	50%	---	---	---	---	---	---	R to 212	---	---	---
Sodium Hydroxide NaOH	1%	---	---	---	---	---	---	---	R to 140	---	---
	5%	---	---	---	---	---	---	C to 68	---	---	---
	15%	120	180	212	140 140	140	140 140	---	R to 140	---	---
	30%	120	180	212	---	R to 140	---	N	R to 140	---	---
	40%	---	---	---	---	---	---	---	R to 140	---	---
	50%	120	180	212	140	140	140	---	140	C to 104	---
	60%	---	---	---	---	---	---	---	R to 140	---	---
	70%	120	180	212	140	140	140	---	140	---	---
Sodium Hypochlorite NaOCl o5H ₂ O	--	120	180	73	73	140	140	---	140	---	N
	2% Cl	---	---	---	---	---	---	R to 212	---	---	---
	12.5% Cl	---	---	---	---	---	---	R to 68	---	---	---
Sodium Iodide NaI	--	---	180	---	140	---	---	---	---	---	---
Sodium Metaphosphate (NaPO ₃) _n	--	---	180	120	140	---	---	---	---	---	---
Sodium Nitrate NaNO ₃	Sat'd	160	180	180	140	140	140	R to 212	140	---	---
Sodium Nitrite NaNO ₂	--	160	180	73	140	140	140	R to 212	140	---	---
Sodium Palmitate CH ₃ (CH ₂) ₁₄ COONa	5%	---	180	140	140	---	---	---	---	---	---
Sodium Perborate NaBO ₃ o4H ₂ O	--	120	180	73	140	73	---	---	73	---	---
Sodium Perchlorate NaClO ₄	--	---	180	212	140	140	---	---	140	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Sodium Peroxide Na ₂ O ₂	10%	---	180	---	140	140	---	---	140	---	---
Sodium Phosphate NaH ₂ PO ₄	Acid	120	180	212	140	140	140	R to 140	140	---	---
	Alkaline	---	120	180	212	140	140	---	140	---	---
	Neutral	---	120	180	212	140	140	---	R to 212	---	---
Sodium Silicate 2Na ₂ O·SiO ₂	--	----	180	140	140	140	140	---	140	---	---
	10%	-	---	---	---	---	---	R to 140	---	---	---
	50%	---	---	---	---	---	---	R to 212	---	---	---
Sodium Sulfate Na ₂ SO ₄	Sat'd	160	180	212	140	140	140	R to 212	---	---	---
	0.10%	---	---	---	---	---	---	R to 140	---	---	---
Sodium Sulfide Na ₂ S	Sat'd	160	180	212	140	140	140	---	140	C to 104	---
Sodium Sulfite Na ₂ SO ₃	Sat'd	160	180	212	140	140	140	R to 212	140	---	---
Sodium Thiosulfate Na ₂ S ₂ O ₃ ·5H ₂ O	--	---	180	180	140	140	140	---	140	---	---
	50%	---	---	---	---	---	---	R to 248	---	---	---
Sour Crude Oil	--	---	---	140	140	---	---	---	---	---	---
Soybean Oil	--	---	---	73	---	140	---	---	140	---	---
Stannic Chloride SnCl ₄	Sat'd	---	180	140	140	140	140	---	140	---	---
Stannous Chloride SnCl ₂	15%	120	180	140	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	140	---	---	140	---	---
Starch	--	---	180	140	140	140	---	---	140	---	---
Starch Solution	Sat'd	---	---	---	---	140	---	---	140	---	---
Stearic Acid CH ₃ (CH ₂) ₁₆ COOH	--	---	180	73	140	120	150	---	120	C to 194	---
	100%	---	---	---	---	R to 120	---	---	R to 120	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Stoddard's Solvent	--	---	N	---	N	73	140	---	73	---	---
Styrene C ₆ H ₅ CH=CH ₂	--	---	---	73	---	C to 73	---	---	C to 73	R to 104	---
Succinic Acid COOH(CH ₂) ₂ COOH	--	---	180	140	140	140	---	---	140	---	---
Sugar C ₆ H ₁₂ O ₆	Aq.	---	180	---	140	140	---	---	140	---	---
Sulfamic Acid HSO ₃ NH ₂	20%	--	N	180	N	---	---	---	---	---	---
Sulfate Liquors (Oil)	6%	---	180	140	140	---	---	---	---	---	---
Sulfite Liquors	6%	73	180	---	140	140	---	---	---	---	---
Sulfur S	--	---	180	212	140	140	140	---	---	104	---
Sulfur Chloride S ₂ Cl ₂	--	---	---	C to 73	---	---	---	---	---	---	---
Sulfur Dioxide SO ₂	Gas Dry	N	73	140	140	140	---	---	140	---	---
	Gas Wet	N	N	140	73	120	73	N	120	---	---
Sulfur Trioxide SO ₃	Gas Dry	---	---	---	140	N	---	N	N	C to 68	---
	Gas	---	N	---	73	N	---	N	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Sulfuric Acid H ₂ SO ₄	5%	---	---	---	---	---	---	---	---	---	R to 73
	30%	120	180	180	140	140	140	R to 248	R to 140	---	N
	50%	73	180	140	140	120	C to 73	R to 212	R to 140	---	---
	60%	C to 73	180	73	140	120	C to 73	R to 248	---	---	---
	70%	C to 73	180	73	140	R to 120	C to 73	---	---	---	---
	80%	C to 73	180	73	140	R to 120	N	C to 248	---	---	---
	90%	C to 73	150	73	73	120	N	R to 212	---	---	---
	93%	N	140	C to 73	73	C to 73	N	---	---	---	---
	94% - 98%	N	130	C to 73	N	C to 73	N	C to 212	N	---	---
100%	N	N	C to 73	N	C to 73	N	---	---	C to 194	---	
Sulfurous Acid H ₂ SO ₃	--	---	180	140	140	140	140	R to 212	140	---	---
Tall Oil	--	---	C to 180	180	140	120	---	---	120	---	---
Tannic Acid C ₇₆ H ₅₂ O ₄₆	10%	N	180	73	140	140	140	R to 212	140	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Tanning Liquors	--	160	180	73	140	120	140	---	120	---	---
Tar	--	---	N	---	N	---	---	---	---	---	---
Tartaric Acid HOOC(CHOH) ₂ COOH	--	160	180	140	140	140	140	R to 248	140	---	---
	Sat'd	---	---	---	---	---	---	R to 248	R to 176	R to 194	---
Terpineol C ₁₀ H ₁₇ OH	--	---	---	---	C to 140	---	---	---	---	---	---
Tetrachloroethane CHCl ₂ CHCl ₂	--	---	---	C to 73	C to 140	C to 120	---	---	C to 120	---	---
Tetrachloroethylene Cl ₂ C=CCl ₂	--	N	N	C to 73	C to 140	C to 120	---	C to 212	C to 120	C to 68	---
Tetraethyl Lead Pb(C ₂ H ₅) ₄	--	---	73	73	73	---	---	---	---	68	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Tetrahydrofuran C ₄ H ₈ O	--	N	N	C to 73	N	C to 73	C to 73	C to 68	N	---	---
Tetralin C ₁₀ H ₁₂	--	---	N	N	N	N	---	---	N	---	---
Tetra Sodium Pyrophosphate Na ₄ P ₂ O ₇ •10H ₂ O	--	---	180	---	140	---	---	---	---	---	---
Thionyl Chloride SOCl ₂	--	---	N	N	N	N	140	N	N	---	---
Thread Cutting Oils	--	---	73	73	73	---	---	---	---	---	---
Tin (II) Chloride SnCl ₂	--	---	---	---	---	---	---	R to 212	---	---	---
Tin (IV) Chloride SnCl ₄	--	---	---	---	---	---	---	R to 212	---	---	---
Titanium Tetrachloride TiCl ₄	--	---	---	140	C to 73	120	---	---	120	---	---
Toluene (Toluol) CH ₃ C ₆ H ₅	--	N	N	C to 73	N	C to 120	N	---	C to 120	R to 140	R to 73
Tomato Juice	--	---	180	212	140	140	---	---	140	--	---
Transformer Oil	--	---	180	73	140	C to 120	---	---	C to 120	---	---
Transformer Oil DTE/30	--	---	180	---	140	R to 120	---	---	R to 120	---	---
Tributyl Citrate C ₁₈ H ₃₂ O ₇	--	---	---	C to 73	73	C to 120	---	---	C to 120	---	---
Tributyl Phosphate (C ₄ H ₉) ₃ PO ₄	--	---	N	C to 140	N	73	---	---	73	R to 194	---
Trichloroacetic Acid CCl ₃ COOH	50%	---	---	140	140	140	---	R to 104	140	---	---
	10%	---	---	---	---	140	---	---	140	---	---
Trichlorobenzene C ₆ H ₃ Cl ₃	--	---	---	---	---	---	---	R to 140	---	---	---
Trichloroethane C ₂ H ₃ Cl ₃	--	---	---	---	---	---	---	---	---	---	R to 122
Trichloroethylene CHCl=CCl ₂	--	N	N	N	N	C to 120	N	R to 176	C to 68	C to 68	R to 176
Triethanolamine (HOCH ₂ CH ₂) ₃ N	--	C to 73	73	140	73	73	73	C to 104	73	---	---
Triethylamine (C ₂ H ₅) ₃ N	--	---	---	N	140	73	---	---	73	---	---
Trimethylolpropane (CH ₂ OH) ₃ C ₃ H ₅	--	---	---	140	73	C to 120	---	---	C to 120	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Trisodium Phosphate Na ₃ PO ₄ • 12H ₂ O	--	73	180	140	140	140	140	---	140	---	---
Turpentine	--	N	N	N	140	C to 120	C to 73	---	C to 120	R to 140	---
Urea CO(NH ₂) ₂	--	---	180	180	140	140	140	---	140	---	---
	10%	-	---	---	---	---	---	R to 212	---	---	---
	Sat'd	---	---	---	---	---	---	R to 176	---	C to 140	---
Urine	--	160	180	180	140	140	140	---	140	---	---
Vaseline (Petroleum Jelly)	--	---	N	140	N	120	---	---	120	---	---
Vegetable Oil	--	---	C to 180	140	140	R to 140	---	R to 248	R to 140	---	---
Vinegar	--	73	150	140	140	140	140	---	140	194	---
Vinyl Acetate CH ₃ COOCH=CH ₂	--	---	N	73	N	140	---	C to 68	140	---	---
Water, Acid Mine H ₂ O	--	160	180	140	140	140	180	---	140	---	194
Water, Deionized H ₂ O	--	160	180	140	140	140	180	---	140	194	176
Water, Distilled H ₂ O	--	160	180	212	140	140	180	R to 248	140	194	---
Water, Potable H ₂ O	--	160	180	212	140	140	180	R to 248	140	194	---
Water, Salt H ₂ O	--	160	180	212	140	140	180	---	140	194	---
Water, Sea H ₂ O	--	160	180	212	140	140	180	R to 248	140	194	R to 176
Water, Soft H ₂ O	--	160	180	212	140	140	180	---	140	194	---
Water, Waste H ₂ O	--	73	180	212	140	140	180	---	140	194	---
Whiskey	--	---	180	140	140	140	140	R to 212	140	---	---
White Liquor	--	73	180	---	140	---	---	---	---	---	---
Wine	--	73	180	140	140	140	140	R to 248	140	---	---
Wines and Spirits	--	---	---	---	---	---	---	R to 212	---	---	---

Chemical (Formula)	Concentration	ABS	CPVC	PP	PVC	PE	PB	PVDF	PEX	PA 11	PK
Xylene (Xylol) C ₆ H ₄ (CH ₃) ₂	--	N	N	N	N	N	N	C to 140	N	C to 194	---
Zinc Acetate Zn(CH ₃ COO) ₂ o2H ₂ O	--	---	180	---	---	---	---	---	---	---	---
Zinc Carbonate ZnCO ₃	--	---	180	140	---	140	---	R to 212	140	---	---
Zinc Chloride ZnCl ₂	--	120	180	180	140	140	---	---	140	---	---
	50%	---	---	---	---	---	---	---	---	C to 73	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Zinc Nitrate Zn(NO ₃) ₂ o6H ₂ O	--	160	180	180	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---
Zinc Oxide ZnO	--	---	---	---	---	---	---	R to 212	---	---	---
Zinc Stearate (CH ₃ (CH ₂) ₁₆ COO) ₂ Zn	--	---	---	---	---	---	---	R to 122	---	---	---
Zinc Sulfate ZnSO ₄ o7H ₂ O	--	160	180	212	140	140	140	---	140	---	---
	Sat'd	---	---	---	---	---	---	R to 212	---	---	---