

CHEMICAL RESISTANCE GUIDE



CHEMICAL RESISTANCE

	ABBREVIATION	MATERIAL
PLASTIC	PVC	Polyvinyl Chloride (Unplasticized PVC)
	CPVC	Chlorinated Polyvinyl Chloride
	PP	Polypropylene
	PVDF	Polyvinylidene Fluoride
	PTFE	Polytetrafluoroethylene
	ABS	Acrylonitrile Butadiene Styrene
RUBBER	EPDM	Ethylene Propylene diene Methylene
	FKM	Fluoro Rubber or Fluorocarbon Rubber

COLOUR	CHEMICAL RESISTANCE
	Excellent Resistance
	Good Resistance
	Conditionally Resistance
	Not Recommended

*Cautionary Note Regarding This Chemical Resistance Guide

This table is intended to serve as a guide only. The information based on data accumulated from immersion test and experiments herein is believed to be reliable, but no representations, guarantee or warranties of any kinds are made as to its accuracy, suitability for particular applications or results to be obtained.

The use of several chemicals may change the viability of the pipe, and therefore the accuracy of these tables

*Note Regarding Pressure Ratings

Please refer to the appropriate ABS/Schedule 80 technical brochure for specific pressure ratings and relevant associated information.

CHEMICAL RESISTANCE



Chemicals	Dilution	Temp C	Temp F	PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
Acetaldehyde CH ₃ CHO	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetamide CH ₃ CONH ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetic Acid CH ₃ COOH	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetic Acid CH ₃ COOH	20%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetic Acid CH ₃ COOH	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetic Acid CH ₃ COOH	80%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetic anhydride (CH ₃ CO) ₂ O	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetone CH ₃ COCH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetonitrile CH ₃ CN	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetophenone C ₆ H ₅ COCH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetyl acetone CH ₃ COCH ₂ COCH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetyl bromide CH ₃ COBr	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp C	Temp F	PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
Acetyl chloride CH ₃ COCl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acetylene C ₂ H ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Acrylonitrile CH ₂ =CHCN	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aipic acid Aqueous	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Allyl alcohol CH ₂ =CHCH ₂ OH	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Allyl chloride CH ₂ =CHCH ₂ Cl	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium Ammonium sulfate (Ammonium alum) (NH ₄) ₂ SO ₄ Al ₂ (SO ₄) ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Alum(Potassium alum) K ₂ SO ₄ Al ₂ (SO ₄) ₃ 24H ₂ O	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium acetate (CH ₃ COO) ₃ Al	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium bromide AlBr ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium chloride AlCl ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium fluoride AlF ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

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CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Aluminium hydroxide Al(OH) ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium nitrate Al(NO ₃) ₃ · 9H ₂ O	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aluminium sulfate Al ₂ (SO ₄) ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Amber acid (Succinic acid) COOH(CH ₂) ₂ COOH	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aminoacetic acid NH ₂ CH ₂ COOH	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonia gas NH ₃	100%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonia liquid NH ₃	100%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonia water NH ₃ Aq	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonia water NH ₃ Aq	40%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium phosphate	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium acetate CH ₃ COONH ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium carbonate (NH ₄) ₂ CO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Ammonium chloride NH ₄ Cl	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium fluoride NH ₄ F	20%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium hydrogen carbonate NH ₄ HCO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium hydrogendifluoride NH ₄ HF ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium metaphosphate NH ₄ PO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium nitrate NH ₄ NO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium perchlorate NH ₄ ClO ₄	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium sulphate (NH ₄) ₂ SO ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium sulfide (NH ₄) ₂ S	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ammonium sulfite (NH ₄) ₂ SO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Amyl acetate CH ₃ CO ₂ (CH ₂) ₄ CH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Amyl alcohol C ₅ H ₁₁ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

CHEMICAL RESISTANCE

A-B

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Amyl chloride CH ₃ (CH ₂) ₄ Cl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aniline C ₆ H ₅ NH ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aniline hydrochloride C ₆ H ₅ NH ₂ · HCl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Animal oil(Lard)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Antimony trichloride SbCl ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Aqua regia 3HCl+HNO ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Arsenic acid H ₃ AsO ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Asphalt	Pure	20	68								

B

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Bleaching liquor Ca(ClO) ₂	5%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Bleaching liquor Ca(ClO) ₂	12%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Borax Na ₂ B ₄ O ₇	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Boric acid H ₃ BO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Boron trichloride BCl ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Brine	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Bromic acid HBrO ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Bromine vapor	25%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Bromine water	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butadiene CH ₂ =CH-CH=CH ₂	Gas	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butane CH ₃ (CH ₂) ₂ CH ₃	Gas	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl acetate CH ₃ COOC ₄ H ₉	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Butyl acrylate CH ₂ CHCOOC ₄ H ₉	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl alcohol C ₄ H ₉ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl amine CH ₃ (CH ₂) ₃ NH ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl bromide CH ₃ (CH ₂) ₃ Br	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl carbitol O < CH ₂ CH ₂ OC ₄ H ₉ CH ₂ CH ₂ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl celloxolve C ₄ H ₉ O(CH ₂) ₂ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl chloride CH ₃ (CH ₂) ₃ Cl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl ether [CH ₃ (CH ₂) ₃] ₂ O	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl mercaptan CH ₃ (CH ₂) ₃ SH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl phenol C ₆ H ₄ (OH)(C ₄ H ₉)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl phthalate C ₆ H ₄ (COOC ₄ H ₉)(COOH)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyl stearate C ₁₇ H ₃₅ COOC ₄ H ₉	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Butylene CH ₃ CH ₂ CH=CH ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butynediol HOCH ₂ C≡CCH ₂ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Butyric acid CH ₃ CH ₂ CH ₂ COOH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Caffeine citrate	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Calcium acetate Ca(CH ₃ COO) ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Calcium bromide CaBr ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Calcium carbonate CaCO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Calcium chlorate Ca(ClO ₃)											

C

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Castor oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Caustic potash (Potassium hydroxide) KOH	14%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Caustic potash (Potassium hydroxide) KOH	25%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chloric acid HClO ₃	20%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chlorine dioxide ClO ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chlorine gas Cl ₂	Wet	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chlorine gas Cl ₂	Dry	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chlorine water Cl ₂ Aq	400 ppm	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chlorobenzene C ₆ H ₅ Cl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chloro sulfonic acid SO ₂ Cl(OH)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chloroacetic acid CH ₂ ClCOOH	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chloroform CHCl ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Chromic acid H ₂ CrO ₄	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chromic acid H ₂ CrO ₄	20%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chromic acid H ₂ CrO ₄	40%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chromic acid H ₂ CrO ₄	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chromic acid H ₂ CrO ₄	60%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Chromium alum KCr(SO ₄) ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Citric acid C ₆ H ₈ O ₇	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Coconut oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper acetate Cu(CH ₃ COO) ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper borofluoride CuBF ₄	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper carbonate CuCO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper chloride CuCl ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Copper cyanide CuCN	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper fluoride CuF	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Copper sulphate CuSO ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Corn oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Corn syrup	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Cottonseed oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Creosote	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Cresol C ₆ H ₄ (CH ₃)OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Croton aldehyde CH ₃											

D-E

CHEMICAL RESISTANCE

CHEMICAL RESISTANCE

E-F

Chemicals	Dilution	Temp C	Temp F	PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
Dibutyl sebacate $C_4H_9OCO(CH_2)_8COOC_4H_9$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dichlorobenzene $C_6H_4Cl_2$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dichloroethylene $CH_2=CCl_2$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dichloroisopropyl ether $Cl-CH_2-CH(O-CH(CH_3)_2)-CH_2-Cl$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diesel fuels		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diethylamine $(C_2H_5)_2NH$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diethylene triamine $NH(C_2H_4NH_2)_2$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diethyl ether $C_2H_5CO_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diglycolic acid $O(CH_2COOH)_2$	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diisobutyl keton $[(CH_3)_2CHCH_2]_2CO$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diisobutylene C_8H_{16}	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diisopropyl keton $[(CH_3)_2CH]_2CO$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp C	Temp F	PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
Dimethyl acetamide $CH_3CON(CH_3)_2$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dimethylformamide $HCON(CH_3)_2$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dimethyl phthalate $C_6H_4(COOCH_3)_2$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dimethyl sulfoxide $(CH_3)_2SO$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dimethylamine $(CH_3)_2NH$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dimethylaniline $C_6H_5NH_2$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Di-octyl phthalate $C_6H_4(COOC_8H_{17})_2$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dioxan $C_4H_8O_2$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Dioxolane $OCH_2CH_2OCH_2$		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Diphenyl oxide $C_6H_5OC_6H_5$	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Epichlorohydrin $CH_2-CH-CH_2Cl$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethanolamine $H_2NCH_2CH_2OH$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp C	Temp F	PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
Ethyl acetate $CH_3COOC_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl acetoacetate $CH_3COCH_2COOC_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl acrylate $CH_2=CHCOOC_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl alcohol C_2H_5OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl benzene $C_6H_5C_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl chloride C_2H_5Cl	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl ether $(C_2H_5)_2O$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ethyl formate $HCOOC_2H_5$	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								

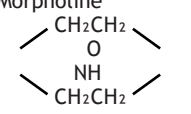
M

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Manganese sulphate MnSO ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Mercuric chloride HgCl ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Mercuric cyanide Hg(CN) ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Mercuric sulphate HgSO ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Mercurous nitrate Hg ₂ (NO ₃) ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Mercury Hg		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methane CH ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methanesulfonic acid CH ₃ SO ₃ H	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl acetate CH ₃ COOCH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl acrylate CH ₂ CHCOOCH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl alcohol CH ₃ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl amine CH ₃ NH ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Methyl bromide CH ₃ Br		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl cellosolve HOCH ₂ CH ₂ OCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl chloride CH ₃ Cl		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl chloroform CH ₃ CCl ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl ether (CH ₃) ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl ethyl ketone CH ₃ COC ₂ H ₅		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl formate HCOOCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl isobutyl carbinol C ₄ H ₉ CH(CH ₃)OH		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl isobutyl ketone (CH ₃) ₂ CHCH ₂ COCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl isopropyl ketone CH ₃ COCH(CH ₃) ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl methacrylate CH ₂ C(CH ₃)COOCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methyl salicylate C ₆ H ₄ (OH)COOCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Methylaniline C ₆ H ₅ NHCH ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methylene bromide CH ₂ Br ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methylene chloride CH ₂ Cl ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Methylene iodide CH ₂ I ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Magnesium sulphate MgSO ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Morpholine 	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Naphthalene C ₁₀ H ₈		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Natural gas		20	68								
		40	104								
		6									

N-P

CHEMICAL RESISTANCE

CHEMICAL RESISTANCE

P

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Nitromethane CH ₃ NO ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Nitrotoluene NO ₂ C ₆ H ₄ CH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Nitrous acid HNO ₂	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Nitrous oxide N ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Octane C ₈ H ₁₈		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Octene CH ₃ (CH ₂) ₅ CH=CH ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Oleic acid C ₁₈ H ₃₄ O ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Olive oil		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Oxalic acid HOOC-COOH	20%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Oxalic acid HOOC-COOH	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Oxygen gas O ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Ozone O ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Palmitic acid C ₁₅ H ₃₁ COOH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Paraffin		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Peanut oil		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Perchloric acid HClO ₄	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Perchloric acid HClO ₄	70%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Perphosphate		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Petroleum oil		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phenol C ₆ H ₅ OH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phenyl disulfide C ₆ H ₅ SSC ₆ H ₅		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phenylhydrazine C ₆ H ₅ NNH ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosgene gas COCl ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphoric acid H ₃ PO ₄	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Phosphoric acid H ₃ PO ₄	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphoric acid H ₃ PO ₄	80%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphorus pentoxide P ₂ O ₅		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphorus red P ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphorus trichloride PCl ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phosphorus oxychloride POCl ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Phthalic acid C ₆ H ₄ (COOH) ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Picric acid C ₆ H ₂ (OH)(NO ₂) ₃	10%	20	68								
		40	104								
		60	140								
		80	176								

S

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Sodium fluoride NaF		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydrogen carbonate Na ₂ HCO ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydrogen sulphate NaHSO ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydroxide NaOH	5%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydroxide NaOH	15%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydroxide NaOH	30%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hydroxide NaOH	50%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hypochlorite NaClO	3%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hypochlorite NaClO	5%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hypochlorite NaClO	7%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hypochlorite NaClO	10%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium hypochlorite NaClO	13%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Sodium iodide NaI		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium metasilicate Na ₂ SiO ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium nitrate NaNO ₃	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium nitrite NaNO ₂	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium palmitate C ₁₅ H ₃₁ COONa	5%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium perborate NaBO ₃ · 4H ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium perchlorate NaClO ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium peroxide Na ₂ O ₂		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium persulphate Na ₂ S ₂ O ₈	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium phosphate NaH ₂ PO ₄ · 2H ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium phosphate Na ₂ HPO ₄ · 12H ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium phosphate Na ₃ PO ₄ · 12H ₂ O		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

CHEMICAL RESISTANCE

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Sodium silicofluoride Na ₂ SiF ₆		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium sulphate Na ₂ SO ₄	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium sulphide Na ₂ S		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium sulphite Na ₂ SO ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium thiocyanate NaSCN		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sodium thiosulphate Na ₂ S ₂ O ₃		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Soybean oil		20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Stannic chloride (Tin(IV) chloride) SnCl ₄		20	68								
		40	104								
		60	140								
		80	176								
		100	212								

S-T

CHEMICAL RESISTANCE

CHEMICAL RESISTANCE

T-Z

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Sulphuric acid H ₂ SO ₄	90%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sulphuric acid H ₂ SO ₄	98%	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sulphuric anhydride SO ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sulphurous acid H ₂ SO ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sulphuryl chloride SO ₂ Cl ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Sumition® (Insecticide)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tall oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tannic acid C ₇₆ H ₅₂ O ₄₆	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tar	Satu	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tartaric acid (Dioxysuccinic acid) CH(OH)COOH CH(OH)COOH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tertiary butyl alcohol (CH ₃) ₃ COH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tetra chloroethylene Cl ₂ C=CCl ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Tetrachloroethane Cl ₂ CHCHCl ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tetraethyl lead Pb(C ₂ H ₅) ₄	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tetrahydrofuran C ₄ H ₈ O	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tetralin (Tetrahydro naphthalene) C ₁₀ H ₁₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Titanic sulphate Ti(SO ₄) ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Titanium tetrachloride TiCl ₄	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Titanous sulphate Ti ₂ (SO ₄) ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Toluene (Toluol) C ₆ H ₅ CH ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Triacetin C ₃ H ₅ (OCOCH ₃) ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Tributyl phosphate (C ₄ H ₉ O) ₃ PO	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Trichloroacetic acid Cl ₃ CCOOH	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Trichloroethylene ClHC=CCl ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								

Chemicals	Dilution	Temp		PVC	CPVC	PP	PVDF	PTFE	ABS	EPDM	FKM
		C	F								
Tricresyl phosphate (CH ₃ C ₆ H ₄ O) ₃ PO	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Triethanolamine N(CH ₂ CH ₂ OH) ₃	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Triethylamine (C ₂ H ₅) ₃ N	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Turbine oil (#140)	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Turpentine oil	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Urea CO(NH ₂) ₂	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Urine	Pure	20	68								
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Vaseline (Petrolatum)	Pure	20	68								
		40									