

# uPVC Chemical Resistance Chart

Three different classes of chemical resistance degree are conventionally used in this guide ie:

**Class 1: HIGH RESISTANCE** (corrosion-proof) - all materials belonging to this class are completely or almost completely corrosion-proof against the conveyed fluid, according to the specified operating conditions.

**Class 2: LIMITED RESISTANCE** - the materials belonging to this class are partially attacked by the conveyed chemical compound. The average life of the material is therefore shorter, and it is advisable to use a higher safety factor by selecting a higher SN rating pipe.

**Class 3: NO RESISTANCE** - all material belonging to this class are subject to corrosion by the conveyed fluid and they should therefore not be used.

The absence of any class indication means that no data are available concerning the chemical resistance of the material in respect of the conveyed fluid.

## ABBREVIATIONS

**sat** = saturated solution at 20°C, **nd** = undefined concentration,  
**deb** = weak concentration, **comm** = commercial solution. **dil** = diluted solution

	FORMULA	CONC %	TEMP (°C)	PVC	PE		FORMULA	CONC %	TEMP (°C)	PVC	PE
ACETALDEHYDE	CH <sub>3</sub> CHO	100	25 60	3 3	1	- FLUORIDE	NH <sub>4</sub> F	25	25 60	1 2	1 1
- AQUEOUS SOLUTION		40	25	3	1	- HYDROXIDE	NH <sub>4</sub> OH	28	25 60	- 2	1 1
ACETIC ACID	CH <sub>3</sub> COOH	≤ 25	25 60	1 2	1 1	- NITRATE	NH <sub>4</sub> NO <sub>3</sub>	sat	25 60	1 1	1 1
		30	25	1	1	- PHOSPHATE DIBASIC	NH <sub>4</sub> (HPO <sub>4</sub> ) <sub>2</sub>	all	25 60	1 1	1 1
		60	25	1	1	- PHOSPHAT META	(NH <sub>4</sub> ) <sub>4</sub> P <sub>4</sub> O <sub>12</sub>	all	25 60	1 1	
- GLACIAL		100	25 60	2 3	1 2	- PHOSPHATE TRI	(NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>	all	25 60	1 1	
ACETIC ANHYDRIDE	(CH <sub>3</sub> CO) <sub>2</sub> O	100	25 60	3 3	2	- PERSULFATE	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	all	25 60	1 1	
ACETONE (DIMETHYL KETONE)	CH <sub>3</sub> COCH <sub>3</sub>	10	25 60	3 3	1	- SULFIDE	(NH <sub>4</sub> ) <sub>2</sub> S	deb	25 60	1 2	1 1
		100	25 60	3 3	2	- SULFHYDRATE	NH <sub>4</sub> OHSO <sub>4</sub>	dil	25 60	1 2	1 1
ACETOPHENONE (ACETYL BENZENE OR PHENYL METHYL KETONE)	CH <sub>3</sub> COC <sub>6</sub> H <sub>5</sub>	nd	25 60					sat	25 60	1 1	1 1
ACRYLONITRILE (ACRYLONITRILE OR VINYL CYANIDE)	CH <sub>2</sub> CHCN	technically pure	25 60	3	1	AMYLACETATE (PENTYL ACETATE)	CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	100	25 60	3 3	1 2
ADIPIC ACID AQUEOUS SOLUTION	(CH <sub>2</sub> CH <sub>2</sub> CO <sub>2</sub> H) <sub>2</sub>	sat.	25 60	1 2	1 1	AMYLALCOHOL	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>2</sub> OH	nd	25 60	1 2	1 1
ALLYL ALCOHOL	CH <sub>2</sub> CHCH <sub>2</sub> OH	96	25 60	2 3	2	ALNILINE (PHENYLAMINE OR AMINO BENZENE) - CHLORHYDRATE (ANILINE HYDROCHLORIDE)	C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub>	all	25 60	3 3	2 2
ALUM AQUEOUS SOLUTION (POTASH ALUM.SOL.)	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> K <sub>2</sub> SO <sub>4</sub> ·H <sub>2</sub> O	dil dil sat.	25 60 60	1 2 2	1 1 1		CH <sub>3</sub> H <sub>5</sub> NH <sub>2</sub> HCl	nd	25 60	2 3	2 2
ALUMINIUM - CHLORIDE	AlCl <sub>3</sub>	all	25 60	1 1	1 1	ANTIMONY - TRICHLORIDE	SbCl <sub>3</sub>	100	25 60	1 1	1 1
- FLORIDE	AlF <sub>3</sub>	100	25 60	1 1	1 1	ANTHRAQUINONE (SULFONIC ACID)	suspension	25	1 60	1 2	- -
- HYDROXIDE	Al(OH) <sub>3</sub>	all	25 60	1 1	-	AQUA REGIA	HCl+HNO <sub>3</sub>	100	25 60	2 2	3 3
NITRATE	Al(NO <sub>2</sub> ) <sub>3</sub>	nd	25 60	1 1	-	ARSENIC ACID	H <sub>3</sub> ASO <sub>4</sub>	deb	25 60	1 2	1 1
SULFATE	Al(SO <sub>4</sub> ) <sub>3</sub>	deb	25 60	1 1	1 1			80	25 60	1 2	1 1
		sat	25 60	1 1	1 1	BARIUM CARBONATE - CHLORIDE	BAC <sub>3</sub>	all	25 60	1 1	1 1
AMMONIA - AQUEOUS SOLUTION	NH <sub>3</sub>	deb	25 60	1 2	1 1	- HYDROXIDE	Ba(OH) <sub>2</sub>	all	25 60	1 1	1 1
- DRY GAS		sat	25 60	1 2	1 1	- SULFATE	BaSO <sub>4</sub>	rib	25 60	1 1	1 1
- LIQUID		100	25 60	1 3	1 1	- SULFIDE	BaS	sat	25 60	1 1	
AMMONIUM - ACETATE - CARBONATE	CH <sub>3</sub> COONH <sub>4</sub>	sat	25 60	- 2	1 1	BEER		comm	25 60	1 1	1 1
	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>	all	25 60	1 2	1 1	BENZALDEHYDE	C <sub>6</sub> H <sub>5</sub> CHO	nd	25 60	3 3	2 2

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	FORMULA	CONC %	TEMP (°C)	PVC	PE		FORMULA	CONC %	TEMP (°C)	PVC	PE
BENZENE (BENZOL)	C <sub>6</sub> H <sub>6</sub>	100	25 60	3 3	3	CHLORAMINE	NH <sub>2</sub> Cl	dil	25 60	1 1	1 1
- + LIGROIN		20/80	25 60	3 3		CHLORIC ACID	HClO <sub>3</sub>	20	25 60	1 2	1 3
- MONOCHLORINE	C <sub>6</sub> H <sub>3</sub> Cl	technically pure	25 60	3 3	2	CHLORINE - DRY GAS	Cl <sub>2</sub>	sat	25 60	2 3	
BENZOIC ACID	C <sub>6</sub> H <sub>5</sub> COOH	sat	25 60	1 2	1 1			10	25 60	1 2	1 2
BENZYL ALCOHOL	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> OH	100	25 60	1 2			100	25 60	2 3	2 3	
BORIC ACID (BORACIC ACID)	H <sub>3</sub> BO <sub>3</sub>	deb sat	25 60 25 60	1 2 1 2	1 1 1 1		5 g/m <sup>3</sup> 10 g/m <sup>3</sup> 66 g/m <sup>3</sup>	25 60	1 3	1 2	
BRINE		comm	25 60	1 1		25 60		2 2	2 2	2 2	
BROMIC ACID	HBrO <sub>3</sub>	10	25 60	1 1	1 1	100		25 60	3	3	3
BROMINE - LIQUID - VAPOURS	Br <sub>2</sub> low	100 25	25 60 2 60	3 3 3	3 3 3	CHLOROACETIC ACID	ClCH <sub>2</sub> COH	85	25 60	1 2	2 3
BUTADIENE	C <sub>4</sub> H <sub>6</sub>	100	25 60	1 1	3			100	25 60	1 2	1 3
BUTANEDIOL AQUEOUS	CH <sub>3</sub> CH <sub>2</sub> CHOHCH <sub>2</sub> OH	10 concentrated	25 60 25 60	1 3 2 3	1 1 2 3	CHLOROBENZENE	C <sub>6</sub> H <sub>5</sub> Cl	all	25 60	3 3	
BUTANE GAS	C <sub>4</sub> H <sub>10</sub>	10	25 60	1 1	1 1	CHLOROFORM	CHCl <sub>3</sub>	all	25 60	3 3	2
BUTYL - ACETATE (BUTANATE) - ALCOHOL (BUTANOL) - PHENOL	CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> C <sub>4</sub> H <sub>9</sub> OH C <sub>4</sub> H <sub>9</sub> C <sub>6</sub> H <sub>4</sub> OH	100	25 60 25 60	3 3 1 2	3 3 1 3	CHLOROSULPHONIC ACID	ClHSO <sub>3</sub>	100	25 60	2 3	3 3
BUTYLENE GLYCOL	C <sub>4</sub> H <sub>6</sub> (OH) <sub>2</sub>	100	25 60	2 2	1	CHROME ALUM	KCr(SO <sub>4</sub> ) <sub>2</sub>	nd	25 60	1 2	1 1
BUTYRIC ACID (BUTANOIC ACID)	C <sub>2</sub> H <sub>5</sub> CH <sub>2</sub> COOH	20 concentrated	25 60 25 60	1 2 3 3	1 1 3 3	CHROMIC ACID	CrO <sub>3</sub> +H <sub>2</sub> O	10 30 50	25 60 25 60	1 2 1 2	2 3 2 3
CALCIUM - BISULFITE - CARBONATE - CHLORATE - CHLORIDE - HYDROXIDE - HYPOCHLORITE - NITRATE - SULFATE - SULFIDE	Ca(HSO <sub>3</sub> ) <sub>2</sub> CaCO <sub>3</sub> CaHCl CaCl <sub>2</sub> Ca(OH) <sub>2</sub> Ca(OH) <sub>2</sub> Ca(NO <sub>3</sub> ) <sub>2</sub> CaSO <sub>4</sub> CaS	nd all nd all all sat 50 nd sat	25 60 25 60 25 60 25 60 25 60	1 1 1 1 1 1 1 1 2	1 1 1 1 1 1 1 1 2	CHROMIC SOLUTION	CrO <sub>3</sub> +H <sub>2</sub> O+H <sub>2</sub> SO <sub>4</sub>	50/35/15	25 60	1 2	3 3
CAMPHOR OIL		nd	25 60	1 1	3 3	CITRIC ACID AQUEOUS SOLUTION	C <sub>3</sub> H <sub>4</sub> (OH)(CO <sub>2</sub> H) <sub>3</sub>	50	25 60	1 1	1 1
CARBON - DIOXIDE AQUEOUS SOLUTION - GAS - DISULFIDE - MONOXIDE - TETRACHLORIDE	CO <sub>2</sub> CS <sub>2</sub> CO CCl <sub>4</sub>	- 100 100 100	25 60 25 60	1 1 1 1	1 1 1 1	COPPER - CHLORIDE - CYANIDE - FLUORIDE - NITRATE - SULFATE	CuCl <sub>2</sub> CuCN <sub>2</sub> CuF <sub>2</sub> Cu(NO <sub>3</sub> ) <sub>2</sub> CuSO <sub>4</sub>	sat all all nd dil sat	25 60 25 60 25 60	1 1 1 1 1 1	1 1 1 1 1 1
CARBONIC ACID - AQUEOUS SOLUTION - DRY - WET	H <sub>2</sub> CO <sub>3</sub>	sat 100 all	25 60 25 60	1 1 1 2	1 1 1 1	COTTONSEED OIL		comm	25 60	1 1	
CARBON OIL		comm	25 60	1 1		CRESOL (HYDROXY TOLUENE)	CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> OH	≤90 ≥90	25 60 25 60	2 3 3 3	1
						CRESYLIC ACID	CH <sub>3</sub> CH <sub>6</sub> H <sub>4</sub> COOH	50	25 60	2 3	
						CYCLOHEXANE	C <sub>6</sub> H <sub>12</sub>	all	25 60	3 3	1
						CYCLOHEXANONE	C <sub>6</sub> H <sub>10</sub> O	all	25 60	3 3	1
						DECAHYDRONAFTALENE	C <sub>10</sub> H <sub>18</sub>	nd	25 60	1 1	1 2
						DEMINEALIZED WATER		100	25 60	1 1	1 1
						DIBUTYPHTHALATE	C <sub>6</sub> H <sub>4</sub> (CO <sub>2</sub> C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub>	100	25 60	3 3	3
						DICHLORO-ACETIC ACID	Cl <sub>2</sub> CHCOOH	100	25 60	1 2	1 1
						DICHLOROETHANE (ETHYLENE DICHLORIDE)	CH <sub>2</sub> ClCH <sub>2</sub> Cl	100	25 60	3 3	3 3
						DICHLOROETHYLENE	Cl(CH <sub>2</sub> ) <sub>2</sub> Cl	100	25 60	3 3	3 3
						DIETHYL ETHER	C <sub>2</sub> H <sub>5</sub> OC <sub>2</sub> H <sub>5</sub>	100	25 60	3 3	3 3
						DIGLYCOLIC ACID	(CH <sub>2</sub> ) <sub>2</sub> O(CO <sub>2</sub> H) <sub>2</sub>	18	25 60	1 2	1 1
						DIMETHYLAMINE	(CH <sub>3</sub> ) <sub>2</sub> NH	100	25 60	2 3	2 2

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	FORMULA	CONC %	TEMP (°C)	PVC	PE		FORMULA	CONC %	TEMP (°C)	PVC	PE
DI-OCTYLPHTHALATE		all	25 60	3 3	1 2	HYDROCHLORIC ACID (MURIATIC ACID)	HCl	≤25	25 60	1 2	1 1
DISTILLED WATER		100	25 60	1 1	1 1			≤ 37	25 60	1 1	1 2
DRINKING WATER		100	25 60	1 1	1 1	HYDROCYANIC ACID (PRUSSIC ACID OR HYDROGEN CYANIDE)	HCN	deb	25 60	1 1	1 1
ETHERS		all	25 60	3 3				HYDROFLUORIC ACID	HF	10	25 60
ETHYL - ACETATE (ACETIC ETHER) - ALCOHOL (ETHANOL) - CHLORIDE - ETHER	CH <sub>3</sub> CO <sub>2</sub> C <sub>2</sub> H <sub>5</sub>	100	25 60	3 3	1 3	HYDROGEN	H <sub>2</sub>	all	25 60		
	CH <sub>3</sub> CH <sub>2</sub> OH	nd	25 60	1 2	1 2			HYDROGEN - PEROXIDE (BLEACH)	H <sub>2</sub> O <sub>2</sub>	30	25 60
	CH <sub>3</sub> CH <sub>2</sub> Cl	all	25 60	3 3	2 2	- SULFIDE DRY	sat			25 60	1 2
	CH <sub>3</sub> CH <sub>2</sub> OCH <sub>2</sub> CH <sub>3</sub>	all	25 60	3 3		- SULFIDE WET	sat	25 60	1 2	1 1	
ETHYLENE - CHLOROHYDRIN - GLYCOL (ETHANEDIOL OR GLYCOL) FATTY ACIDS	ClCH <sub>2</sub> CH <sub>2</sub> OH HOCH <sub>2</sub> CH <sub>2</sub> OH	100 comm	25 60	3 1	3 3	HYDROSUPHITE		≤10	25 60	1 2	
FERRIC - CHLORIDE  - NITRATE  - DEXTRINE (BRITISH GUM OR STARCH GUM) - SULFATE	FeCl <sub>3</sub>	10	25 60	1 2	1 1	HYDROXYLAMINE SULPHATE	(H <sub>2</sub> NOH) <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	12	25 60	1 1	1 1
		sat	25 60	1 1	1 1	ILLUMINATING GAS		100	25 60	1 1	1 1
	Fe(NO <sub>3</sub> ) <sub>3</sub>	nd	25 60	1 1	1 1	IODINE - DRY AND WET - TINCTURE	I <sub>2</sub>	3	25 60	2 3	
	C <sub>6</sub> H <sub>12</sub> OCH <sub>2</sub> O	nd	25 60	1 2	1 1	ISOCTANE	C <sub>8</sub> H <sub>18</sub>	100	25 60	1 2	2 3
FERROUS - CHLORIDE - SULFATE	FeCl <sub>2</sub> FeSO <sub>4</sub>	sat nd	25 60	1 1	1 1	ISO-OCTANE	(CH <sub>3</sub> ) <sub>3</sub> CCH <sub>2</sub> (CH <sub>3</sub> ) <sub>2</sub>				
FERTILIZER		≤ 10 sat	25 60	1 1	1 1	ISOPROPYL -ETHER	(CH <sub>3</sub> ) <sub>2</sub> CHOCH(CH <sub>3</sub> ) <sub>2</sub>	100	25 60	2 3	2 3
FLUORINE GAS DRY	F <sub>2</sub>	100	25 60	2 3	2 3	- ALCOHOL (ISOPROPANOL)	(CH <sub>3</sub> ) <sub>2</sub> CHOH	100	25 60		
FLUROSILICIC ACID	H <sub>2</sub> SiF <sub>6</sub>	32	25 60	1 1	1 1	LACTIC ACID	CH <sub>3</sub> COHCOOH	≤28	25 60	1 2	1 1
FORMALDEHYDE	HCOH	-	25 60	1 2	1 1	LANOLINE		nd	25 60	1 2	1 1
FORMIC ACID	HCOOH	50 100	25 60	1 2	1 1	LEAD ACETATE	Pb(CH <sub>3</sub> COO) <sub>2</sub>	sat	25 60	1 1	1 -
FRUIT PULP AND JUICE		comm	25 60	1 1	1 1	LINSEED OIL		comm	25 60	1 2	2 2
FUEL OIL		100 comm	25 60	1 1	- 2	LUBRICATING OILS		comm	25 60	1 1	3 3
FURFUROLE ALCOHOL	C <sub>5</sub> H <sub>3</sub> OCH <sub>2</sub> OH	nd	25 60	3 3	2 2	MAGNESIUM - CARBONATE	MgCO <sub>3</sub>	all	25 60	1 1	
GAS EXHAUST - ACID - WITH NITROUS - VAPOURS		all	25 60	1 1	1 1	- CHLORIDE	MgCl <sub>2</sub>	sat	25 60	1 1	1 1
GAS PHOSGENE	ClCOCl	100	25 60	1 2	2 2	- HYDROXIDE	Mg(OH) <sub>2</sub>	all	25 60	1 1	
GELATINE		100	25 60	1 1	-	- NITRATE	MgNO <sub>3</sub>	nd	25 60	1 1	1 1
GLUCOSE (DEXTRORSE)	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	all	25 60	1 2	1 1	- SULFATE	MgSO <sub>4</sub>	dil sat	25 60	1 1	1 1
GLYCERINE AQ.SOL.(GLYCEROL)	HOCH <sub>2</sub> CHOHCH <sub>2</sub> OH	all	25 60	1 1	1 1	MALEIC ACID	COOHCH=CHCOOH	nd	25 60	1 1	1 1
GLYCOGLUE AQUEOUS GLYCOLIC ACID		10 37	25 60	1 1	1 1	MALIC ACID (HYDROXYSUCCINIC ACID)	CH <sub>2</sub> CHOH(COOH) <sub>2</sub>	nd	25 60	1 1	- -
HEPTANE	C <sub>7</sub> H <sub>16</sub>	100	25 60	1 2	3	MERCURIC HgCl <sub>2</sub> - CHLORIDE - CYANIDE	sat HgCN <sub>2</sub>	25 all	1 60	1 1	1 1
HEXANE	C <sub>6</sub> H <sub>14</sub>	100	25 60	1 2	2	MERCUROUS NITRATE	HgNO <sub>3</sub>	nd	25 60	1 1	1 1
HYDROBROMIC ACID	HBr	≤10 48	25 60	1 2	1 1	MERCURY	Hg	100	25 60	1 2	1 1
			25 60	1 2	1 1	METHYL - ACETATE	CH <sub>3</sub> COOCH <sub>3</sub>	100	25 60	- -	- -
			25 60	1 2	1 1	- ALCOHOL (METHANOL OR WOODSPIRIT)	CH <sub>3</sub> OH	nd	25 60	1 1	1 1
			25 60	1 2	3	- BROMIDE (BROMOMETHANE)	CH <sub>3</sub> Br	100	25 60	3 3	3 3
			25 60	1 2	2	- CHORIDE (CHLOROMETHANE)	CH <sub>3</sub> Cl	100	25 60	3 3	1 1
			25 60	1 2	1	- ETHYLKETONE	CH <sub>3</sub> COCH <sub>2</sub> CH <sub>3</sub>	all	25 60	3 3	2 2
			25 60	2 3	2	METHYLAMINE	CH <sub>3</sub> NH <sub>2</sub>	32	25 60	2 3	1 2

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	FORMULA	CONC %	TEMP (°C)	PVC	PE		FORMULA	CONC %	TEMP (°C)	PVC	PE
METHYLENE CHLORIDE (DICHLOROMETHANE)	CH <sub>2</sub> Cl <sub>2</sub>	100	25 60	3 3	3	- ANHYDRIDE	P <sub>2</sub> O <sub>5</sub>	≤85 60	25 1	1 2	1 1
METHYL SULPHURIC ACID	CH <sub>3</sub> COOSO <sub>4</sub>	50	25 60	1 2	2			25 60	1 2	1 1	1 1
MILK		100	25 60	1 1	1	PHOSPHORUS TRICHLORIDE	PCl <sub>3</sub>	100	25 60	3 3	1
MINERAL ACID/DOULOUS WATER		nd	25 60	1 1	1	PHOTOGRAPHIC - DEVELOPER - EMULSION		comm	25 60	1 1	1
MOLASSES		comm	25 60	1 2	2	PHTHALIC ACID	C <sub>6</sub> H <sub>4</sub> (CO <sub>2</sub> H) <sub>2</sub>	50	25 60	- 3	1 1
NAPHTA		100	25 60	2 3	2	PICRIC ACID	HOC <sub>6</sub> H <sub>2</sub> (NO <sub>2</sub> ) <sub>3</sub>	1	25 60	1 1	1 -
NAPHTALINE		100	25 60	1 2	1	(2,4,6 TRINITROPENOL)		≥1	25 60	3 3	1
NICKEL - CHLORIDE	NiCl <sub>3</sub>	all	25 60	1 1	1	POTASSIUM - BICHROMATE (POTASSIUM HYDROGENCARBONATE)	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	40	25 60	1 1	1
- NITRATE	Ni(NO <sub>3</sub> ) <sub>2</sub>	nd	25 60	1 1	1	- BORATE	K <sub>3</sub> BO <sub>3</sub>	sat	25 60	1 2	
- SULFATE	NiSO <sub>4</sub>	dil	25 60	1 2	1	- BROMATE	KBrO <sub>3</sub>	nd	25 60	1 2	
		sat	25 60	1 1	1	- BROMIDEKBr		sat	25 60	1 1	1
NITRIC ACID	HNO <sub>3</sub>	anhydrous	25 60	3 3		- CARBONATE (POTASH)	K <sub>2</sub> CO <sub>3</sub>	sat	25 60	1 1	1
		20	25	1	1	- CHLORIDE (POTASSIUM MURIATE)	KCl	sat	25 60	1 1	1
		40	25	1	-	- CHROMATE	K <sub>2</sub> CrO <sub>4</sub>	40	25 60	1 1	1
		60	25	1	3	- CYANIDE	KCN	sat	25 60	1 1	1
		60	25	2	3	- FERROCYANIDE	K <sub>4</sub> Fe(CN) <sub>6</sub> H <sub>2</sub> O	100	25 60	1 1	1
		98	25	3	3	- FLUORIDE	KF	sat	25 60	1 1	
NITROBENZENE	C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>	all	25 60	3 3	2	- HYDROXIDE (CAUSTIC POTASH)	KOH	≤60	25 60	1 2	1
OLEIC ACID	C <sub>18</sub> H <sub>34</sub> O <sub>2</sub>	comm	25 60	1 2		- NITRATE KNO <sub>3</sub> (NITRE, SALTPETRE)	sat	25	1 60	1 1	1
OLEUM (FUMING SULPHURIC ACID OR PYROSULPHURIC ACID)	H <sub>2</sub> S <sub>2</sub> O <sub>7</sub>	nd	25 60	3 3	3	- PERBORATE	KBO <sub>3</sub>	all	25 60	1 1	
- VAPOURS	low	25	3	3		- PERBORATE	KBO <sub>3</sub>	all	25 60	1 1	
	high	25	3	3		- PERMANGANATE (PERMANGANATE OF POTASH)	KMnO <sub>4</sub>	10	25 60	1 1	1
OLIVE OIL	comm	25	60	2	3	- PERSULFATE	K <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	nd	25 60	1 2	1
OXALIC ACID	HO <sub>2</sub> CCO <sub>2</sub> H	10	25 60	1 2	1	- SULFATE	K <sub>2</sub> SO <sub>4</sub>	sat	25 60	1 2	1
		sat	25	1	1	PROPANE - GAS	C <sub>3</sub> H <sub>8</sub>	100	25 60	1	1
OXYGEN	O <sub>2</sub>	all	25 60	1 2	1	- LIQUID		100	25 60	1	2
OZONE	O <sub>3</sub>	nd	25 60	1 2	3	PROPYL ALCOHOL (PROPANOL)	C <sub>3</sub> H <sub>7</sub> OH	100	25 60	1 2	1
PALMITIC ACID	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>14</sub> COOH	10	25 60	1 1	-	PYRIDINE	CH(CH <sub>2</sub> ) <sub>2</sub> N	nd	25 60	3 3	2
		70	25 60	1 1	-	RAIN WATER		100	25 60	1 1	1
PARAFFIN (ALKANE)		nd	25 60	2 2	2	SEA WATER		100	25 60	1 1	1
- EMULSION		comm	25 60	1 2	2	SILICIC ACID	H <sub>2</sub> SiO <sub>3</sub>	all	25 60	1 1	1
- OIL (KEROSENE)		nd	25 60	1 1		SILICONE OIL		nd	25 60	1 3	2
PERCHLORIC ACID	HClO <sub>4</sub>	100	25 60	1 2	1	SILVER - CYANIDE	AgCN	all	25 60	1	
		70	25 60	1 2	1	- NITRATE	AgNO <sub>3</sub>	nd	25 60	1 2	1
PETROL		100	25 60	1 1		- PLATING SOLUTION		comm	25 60	1	
- REFINED			60	1		SOAP - AQUEOUS SOLUTION		high	25 60	1 2	
- UNREFINED		100	25 60	1 1		SODIC LYE		≤60	25 60	1	
PHENOL	C <sub>6</sub> H <sub>5</sub> OH	1	25 60	1 3	1	SODIUM - ACETATE	CH <sub>3</sub> COONa	100	25 60	1 1	1
- AQUEOUS SOLUTION (CARBOLIC ACID)		≤90	25 60	2 3	1						
PHENYL HYDRAZINE	C <sub>6</sub> H <sub>5</sub> NHNH <sub>2</sub>	all	25 60	3 3	2						
- CHLORHYDRATE	C <sub>6</sub> H <sub>5</sub> NHNH <sub>3</sub> Cl	sat	25 60	1 3	3						
PHOSPHORIC - ACID	H <sub>3</sub> PO <sub>4</sub>	≤ 25	25 60	1 2	1						
		≤50	25 60	1 1	1						

# uPVC Chemical Resistance Chart

	FORMULA	CONC %	TEMP (°C)	PVC	PE		FORMULA	CONC %	TEMP (°C)	PVC	PE
- BICARBONATE (SODIUM HYDROGEN CARBONATE)	NaHCO <sub>3</sub>	nd 60	25 1	1 1	1	- FUMING (OLEUM)		60	3	2	
- BISULFITE	NaHSO <sub>3</sub>	100	25 60	1 1	1			all	25 60	2 3	
- BROMIDE	NaBr	sat	25 60	1 1		- NITRIC AQUEOUS SOLUTION	H <sub>2</sub> SO <sub>4</sub> +HNO <sub>3</sub> +H <sub>2</sub> O	48/49/3	25 60	1 3	3
- CARBONATE	Na <sub>2</sub> CO <sub>3</sub>	sat	25 60	1 1	1		50/50/0	25 60	2 3	3	3
- CHLORATE	NaClO <sub>3</sub>	nd	25 60	1 2	1	TALLOW EMULSION		comm	25 60	1 1	1
- CHLORIDE	NaCl	dil sat	25 60 25 60	1 2 1 1	1	TANNIC ACID	C <sub>14</sub> H <sub>10</sub> O <sub>9</sub>	10	25 60	1 1	1
- CYANIDE	NaCN	all	25 60	1 1		TARTARIC ACID	HOOC(CHOH) <sub>2</sub> COOH	all	25 60	1 2	1
- FERROCYANIDE	Na <sub>4</sub> Fe(CN) <sub>6</sub>	sat	25 60	1 1	1	TETRACHLORO - ETHANE	CHCl <sub>2</sub> CHCl <sub>2</sub>	nd	25 60	3 3	2
- FLUORIDE	NaF	all	25 60	1 1	1	- ETHYLENE (PERCHLOROETHYLENE)	CCl <sub>2</sub> CCl <sub>2</sub>	nd	25 60	3 3	2
- HYDROXIDE	NaOH	60	25 60	1 1	1	TETRAETHYLLEAD	Pb(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub>	100	25 60	1 2	1
- HYPOCHLORITE	NaOCl	deb	25 60	1 2	1	TETRAHYDROFURAN	C <sub>4</sub> H <sub>8</sub> O	all	25 60	3 3	2
- HYPOSULFITE	Na <sub>2</sub> S <sub>3</sub> O <sub>3</sub>	nd	25 60	1 1		THIONYL CHLORIDE	SOCl <sub>2</sub>	-	25 60	3 3	3
- NITRATE	NaNO <sub>3</sub>	nd	25 60	1 1	1	THIOPHENE	C <sub>4</sub> H <sub>4</sub> S	100	25 60	3 3	2
- PERBORATE	NaBO <sub>3</sub> H <sub>2</sub> O	all	25 60	1 1		TOLUENE	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	100	25 60	3 3	2
- PHOSPHATE di	Na <sub>2</sub> HPO <sub>4</sub>	all	25 60	1 1		TRANSFORMER OIL		nd	25 60	1 2	1
- PHOSPHATE tri	Na <sub>3</sub> PO <sub>4</sub>	all	25 60	1 1	1	TRICHLORO- ACETIC ACID	CCl <sub>3</sub> COOH	≤50	25 60	1 3	1
- SULPHATE	Na <sub>2</sub> SO <sub>4</sub>	dil sat	25 60 25 60	1 1 1 1		TRICHLOROETHYLENE	Cl <sub>2</sub> CCHCl	100	25 60	3 3	2
- SULFIDE	Na <sub>2</sub> S	dil	25 60	1 2	1	TRIETHANOLAMINE	N(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub>	100	25 60	2 3	1
- SULFITE	NaSO <sub>3</sub>	sat	25 60	1 1		TURPENTINE		100	25 60	2 2	2
STANNIC CHLORIDE	SnCl <sub>4</sub>	sat	25 60	1 1	1	UREA AQUEOUS SOLUTION	CO(NH <sub>2</sub> ) <sub>2</sub>	≤ 10	25 60	1 2	1
STANNOUS CHLORIDE	SnCl <sub>2</sub>	dil	25 60	1 1	1		33	25 60	1 2	1	1
STEARIC ACID	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>16</sub> CO <sub>2</sub> H	100	25 60	1 2		URINE		nd	25 60	1 2	1
SUGAR SYRUP		high	25 60	1 2	1	URIC ACID	C <sub>5</sub> H <sub>4</sub> N <sub>4</sub> O <sub>3</sub>	10	25 60	1 2	
SULPHUR	S	100	25 60	1 2		VASELINE OIL		100	25 60	1 3	1
- DIOXIDE AQUEOUS	SO <sub>2</sub>	sat	25 60	1 2	1	VINYL ACETATE	CH <sub>3</sub> CO <sub>2</sub> CHCH <sub>2</sub>	100	25 60	3 3	
- DIOXIDE DRY		all	25 60	1 1	1	WHISKEY		comm	25 60	1 1	
- DIOXIDE LIQUID		100	25 60	2 3	2	WINES		comm	25 60	1 1	1
- TRIOXIDE	SO <sub>3</sub>	100	25 60	2 2	3	WINE VINEGAR		comm	25 60	1 2	1
SULPHURIC ACID	H <sub>2</sub> SO <sub>4</sub>	≤ 10 ≤75 ≤90 ≤96	25 60 25 60 25 60	1 1 2 2 1 2	1	ZINC - CHLORIDE	ZnCl <sub>2</sub>	dil sat	25 60 25 60	1 1 1 1	1
						- CHROMATE	ZnCrO <sub>4</sub>	all	25 60	1 1	
						- CYANIDE	Zn(CN) <sub>2</sub>	all	25 60	1	
						- NITRATE	Zn(NO <sub>3</sub> ) <sub>2</sub>	nd	25 60	1 1	
						- SULFATE	ZnSO <sub>4</sub>	dil sat	25 60 25 60	1 1 1 1	1