

# CHEMICAL RESISTANCE CHARTS

The information is a guide only and will vary depending on a variety of factors. E.g. the type and strength of chemicals in contact with the duct and varying temperatures and pressures to which it is exposed. The factors may affect the appropriateness and service life of materials in different applications.

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A : Resistant  
B : Moderately Resistant  
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	PVC	HYTREL	POLYETHYLENE	POLYURETHANE	NEOPRENE	SILICONE	POLYAMIDE	TPE SANTOPRENE	PTFE	HYPALON	VITON
<b>A</b>											
ACETALDEHYDE			A	C	C	C	B	A	A		C
ACETIC ACID	C	A	A	C	C	A	C	B	A	A	C
ACETIC ACID ANHYDRIDE	C	B	A	C	A	C		B	A	A	C
ACETON	C	B	A	C	B	B	A	A	A	B	C
ACETYLENE		A	A	B	B			A	A	A	A
ALUMINIUM CHLORIDE SOLUTION		B	A		A	B	A	A	A	A	A
ALUMINIUM SULPHATE SOLUTION	A	B	A	A	A	A	A	A	A	A	A
ACETATE D'AMYLE		B	B	C	C	C		A	C	C	B
AMMONIA (anhydrous)	A		A	C	A	A		B	A	B	C
AMMONIUM CHLORIDE SOLUTION		A	A	C	A			A	A	A	A
AMMONIUM HYDROXIDE SOLUTION		B	A		A			A	A	A	A
AMMONIUM SULPHATE SOLUTION	A	A	A		A	A		A	A	A	A
AMYLACETATE		B	A	C	C	C		A	A	C	C
AMYLALCOHOL	C	A	A	C	A	C		A	A	A	A
ANILINE	C	C	A	C	C		B	B	A	B	A
ASPHALT	A	B	A	C	B	C		C	A	B	A
ASTM Oil No.1		A		A	A	B		C	A	A	A
ASTM Oil No.3		A		B	A	C		C	A	B	A
ASTM Oil Reference Fuel A		A		A	A			C	A	A	A
ASTM Oil Reference Fuel B		A		C	C			C	A	C	A
ASTM Oil Reference Fuel C		A		C	C			C	A	C	A
<b>B</b>											
BARIUM HYDROXIDE		B	A	C	A	A		A	A	A	A
BEER		A	A	A	A	A		A	A	A	A
BENZALDEHYDE	C		A	C	C	C	C	B	A	C	C
BENZENE	C	A	A	A	B	C	A	B	A	B	A
BENZENE CHLORIDE			A		C			C	A	C	B
BENZOL	C	B	A	C	C	C	A	C	A	C	B
BORAX SOLUTION	A	A	A	C	A			A	A	A	A
BORIC ACID SOLUTION	A	A	A	C	A	A	B	A	A	A	A
BROMINE LIQUID (anhydrous)	C	C	C	C	C	C		C	A	A	A
BUTANE	C	C		A	A			B	A	A	A
BUTYL ACETATE	C	B	A	C	C	C	A	C	A	C	C
BUTYRALDEHYDE			A	C	B			B	A	B	C
BUTYRIC ACID		B	A		C			C	A	B	
<b>C</b>											
CALCIUM BISULPHITE SOLUTION			B	A	A	A		B	A	A	A
CALCIUM CHLORIDE SOLUTION	A	A	A	C	A	A	A	A	A	A	A
CALCIUM HYDROXIDE SOLUTION		B	A	C	A	A		A	A	A	A
CALCIUM HYPOCHLORITE SOLUTION (20%)			A	C	B	B		A	A	A	B
CALCIUM HYPOCHLORITE SOLUTION (5%)		A	A	C	B	B		A	A	A	A
CARBON DIOXIDE		A	A	B	A	A		B	A	A	A
CARBON DISULPHIDE	C		A	C	C		A	B	A	C	
CARBON MONOXIDE		A	A		A	A		C	A	A	
CARBON TETRACHLORIDE	C	B	A	C	C	C	A	C	A	C	
CHLORINE GAS (dry)	C	C	B	B	B		C	C	A	B	A
CHLORINE GAS (moist)	C	C	B	C	C		C	C	A	B	B

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	PVC	HYTREL	POLYETHYLENE	POLYURETHANE	NEOPRENE	SILICONE	POLYAMIDE	TPE SANTOPRENE	PTFE	HYPALON	VITON
CHLOROACETIC ACID		C	A	C	A	C		A	A	A	C
CHLOROBENZENE	C	C	A	B	C	C	A	C	A	C	A
CHLOROFORM	C	C	C	C	C	C	C	C	A	C	A
CHLOROSULPHONIC ACID	C	C	C	C	C			C	A	C	C
CHROMIC ACID (10-50%)		C	B	C	C	C	B	C	A	A	A
CITRIC ACID SOLUTION	A	A	A	C	A	A		A	A	A	A
COTTON SEED OIL		A	A	A	A	A		A	A	A	A
CREOSOTE			A		C			C	A	C	A
CUPRIC CHLORIDE SOLUTION		A		A	A	A		A	A	A	A
CUPRIC SULPHATE SOLUTION		A		C	A	A	B	A	A	A	A
CYCLOHEXANE	C	A	A	A	C	C		C	A	C	A
D											
DIBUTYL PHTHALATE		A	A	A	C		A	A	A	C	B
DIETHYL ETHER			A	C	C		A	C	A		
DIETHYL SEBACATE		A		C	C			B	A	B	B
DIETHYL PHTHALATE		A	A	C	C	C	A	B	A	C	B
DOWTHERM A				C	B			C	A	B	A
E											
EPOCHLOROHYDRIN		C	A	C				B	A	B	C
ETHANOL		A	A	B	A	A	A	A	A	A	A
ETHER		C	A	B	C	C		B	A	C	A
ETHYL ALCOHOL		A	A	B	A	A	A	A	A	A	A
ETHYL CHLORIDE		C	A	B	C	C		B	A	C	A
ETHYLACETATE	C	B	A	C	C	B	A	A	A	B	C
ETHYLENE DICHLORIDE	C	C	A	C	B	B		B	A	C	A
ETHYLENE GLYCOL		A	A		A	A		A	A	A	A
ETHYLENE OXIDE		A	A		C			C	A	C	C
EXXON 2380 LUBRICATING OIL		B						C	A		A
F											
FERRIC CHLORIDE SOLUTION	A	B	A		A	A	A	A	A	A	A
FLUROSILICIC ACID		B	A	C	A	C		B	A	A	
FORMALDEHYDE (40%)	C	B	A	C	A		A	A	A	A	A
FORMIC ACID		B	A	C	A	B	C	A	A	A	C
FREON 11		A	A		A	C		C	A	A	A-B
FREON 12		A	A		A	C	A	B	A	A	A-B
FREON 22			A		A	C		C	A	A	C
FREON 113		A	A		A			C	A	A	A
FREON 114		A	A		A			C	A	A	B
FURFUROL			A	C	B		B	B	A	B	C
FYRQUEL 220 (hydraulic fluid)		B							A		A
G											
GLUE		A	A	A	A			A	A	A	A
GLYCERINE (90%)	A	A	A	C	A	A	A	A	A	A	A
GREASE		A	A		B	C		C	A	B	A
H											
n-HEXANE	C	A	A	A	A	C	A	C	A	A	A
HYDRAZINE (diamide)		C				C		A	A		C
HYDROCHLORIC ACID (20%)	B	B	A	C	A	B	C	B	A	A	A
HYDROCHLORIC ACID (37%)	B	C	A	C	A	B	C	A	A	A	A
HYDROCHLORIC ACID (48%)		C	A	C	A			C	B	A	A
HYDROCHLORIC ACID (75%)		C	A	C	B			C	C	A	B

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	PVC	HYTREL	POLYETHYLENE	POLYURETHANE	NEOPRENE	SILICONE	POLYAMIDE	TPE SANTOPRENE	PTFE	HYPALON	VITON
HYDROCHLORIC ACID (anhydrous)		C	A	C	B		C	C	A	A	A
HYDROGEN		A	B	C	A	A		A	A	A	A
HYDROGEN CYANIDE		B			A			A	A	A	
HYDROGEN PEROXIDE (90%)			B	C	B		C	B	A	A	A
HYDROGEN SULPHIDE		A	A	B	A		A	A	A	A	
J											
JP-4		A			C			C	A	C	A
JP-5					C			C	A	C	A
JP-6					C			C	A	C	A
K											
KEROSENE		B	A	A	C	C		C	A	B	A
L											
LACTIC ACID	C	B	A	A	A	A	B	A	A	A	A
LINSEED OIL		B	A	B	A			B	A	A	A
M											
MAGNESIUM CHLORIDE SOLUTION	B	B	A	C	A	A	A	A	A	A	A
MAGNESIUM HYDROXIDE SOLUTION		B	A		A			A	A	A	A
MERCURIC CHLORIDE SOLUTION		B		B	A	A	C	A	A	A	A
MERCURY	A	A	A	A	A	A	A	A	A	A	A
METHANOL	C	A	A	C	A	A	A	A	A	A	B
METHYL ALCOHOL	C	A	A	C	A	A	A	A	A	A	B
METHYLENE CHLORIDE	C	C	A	C	C		B	B	A	C	B
METHYLENE KETONE (MEK)	C	A	A	C	C		A	A	A	C	C
MINERAL OIL	C	A	A	B	A	A	A	C	A	A	A
MOBIL XRM 206A		B							A		A
N											
NAPHTHALENE	C	B	A	C	C	C		C	A	C	A
NAPHTHA	C	A	A	C	C	C		C	A	C	A
NITRIC ACID (10%)		B	A	C	B	B	C	B	A	A	A
NITRIC ACID (30%)		C	A	C	C	B	C	B	A	A	A
NITRIC ACID (60%)		C	C	C	C	C	C	C	A	B	A
NITRIC ACID (70%)		C	C	C	C	C	C	C	A	C	A
NITRIC ACID (fuming)		C		C	C	C	C	C	A	C	B
NITROBENZENE	C	C	A	C	C	C		A	A	C	B
O											
ISO-OCTANE	C	A	A	B	A	C		C	A	A	
OLEIC ACID		A	A		B			B	A	B	B
OLEUM (20-25%)	C	C	C	C	C	C	C	C	A	B	A
P											
PALMITIC ACID		A	A	B	B			B	A	B	A
PERCHLOROETHYLENE	C	C	A	C	C	B		C	A	C	A
PHENOL	C	C	A	C	C	C	C	B	A	C	A
PHOSPHORIC ACID (20%)	A		A	C	A		C	A	A	A	A
PHOSPHORIC ACID (60%)	A	C	A	C	A	C	C	A	A	A	A
PHOSPHORIC ACID (70%)	B	C	A	C	A	C	C	A	A	A	A
PHOSPHORIC ACID (85%)	B	C	A	C	A	C	C	A	A	A	A
PICKLING SOLUTION 17% NITRIC ACID 4% HYDROFLUORIC ACID		C			C			C	A	A	A
PICKLING SOLUTION 20% NITRIC ACID 4% HYDROFLUORIC ACID		C			C			C	A	A	A
PICRIC ACID		B	A	B	A	C		B	A	A	A

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POTASSIUM DICHROMATE SOLUTION	A	B	A	C	A	C		A	A	A	
POTASSIUM HYDROXIDE SOLUTION (dilute)		A	A		A			A	A	A	
ISO-PROPYL ALCOHOL	C	A	A	C	A	A	A	B	A	A	A
ISO-PROPYL ETHER			B	C	C			C	A	B	C
PYDRAUL 312C		A		C	C			C	A	C	A
PYRIDINE	C	C	A	C	C	C	A	B	A	C	C
Q											
QFI-2023 (Silicone brake fluid)		B				A			A		A
QUICK SILVER (mercury)	A	A	A	A	A	A	A	A	A	A	A
R											
RICINOL (Ricinus oil)		B	A		A	A		B	A	A	A
S											
SAE OIL No.10		A			C			C	A	C	A
SEA WATER	A	A	A		A		A	A	A	A	A
SHELL TURBINE OIL 307		B			B			C	A	B	B
SILICONE GREASE		A	A	A	A	C		A	A	A	A
SKYDROL 500		A		C	C	B		A	A	C	C
SKULUBE 450									A		C
SOAP SOLUTION	A	A	A	A	A	A	A	A	A	A	A
SODIUM CHLORIDE SOLUTION		A	A	C	A	A	A	A	A	A	A
SODIUM DICHROMATE (20%)	C	B	A		B			A	A	A	A
SODIUM HYDROXIDE (20%)		A	A		A	B		A	A	A	A
SODIUM HYDROXIDE (46.5%)		B	A		A	B		A	A	A	A
SODIUM HYDROXIDE (50%)			A		A	B		A	A	A	C
SODIUM HYDROXIDE (73%)		A	A		A	B		A	A	A	C
SODIUM HYPOCHLORITE (5%)	A	A	B	C	A	B		A	A	A	A
SODIUM HYPOCHLORITE (20%)	B	B	B	C	B	B		A	A	A	B
SODIUM PEROXIDE SOLUTION		A	C		A	C		A	A	A	A
SOYA BEAN OIL	C	B	A		A	A		C	A	A	A
STANNIC CHLORIDE	A			C	B				A	B	A
STANNIC CHLORIDE (15%)	A	B		C	A			B	A	A	A
STEAM		B		C	A	C		A	A	A	B
STEARIC ACID	A	B	A	A	B	A		B	A	B	
STYRENE	C	C	A	C	C	C	A	C	A	C	A
SULPHUR (molten)	A	B	A	B	A	A		A	A	A	A
SULPHUR DIOXIDE GAS	A	B	A	C	A	A		A	A	A	
SULPHUR DIOXIDE LIQUID	A	B	A	C	A			A	A	A	
SULPHUR TRIOXIDE		C	C	C	C	B		B	A	C	
SULPHURIC ACID (<5%)	A	A	A	C	A	A	C	A	A	A	A
SULPHURIC ACID (5-10%)	A	B	A	C	A	A	C	A	A	A	A
SULPHURIC ACID (10-50%)	B	C	A	C	A		C	B	A	A	A
SULPHURIC ACID (50-80%)	C	C	A	C	B		C	C	A	A	A
SULPHURIC ACID (90%)	C	C	C	C	C		C	C	A	A	A
SULPHURIC ACID (95%)	C	C	C	C	C		C	C	A	A	A
SULPHURIC ACID (fuming, 20% Oleum)	C	C	C	C	C	C	C	C	A	B	A
SULPHUROUS ACID		B		C	C			C	A	A	C
SUNOCO XS-820 (EP Grease)		B						C	A		A
T											
TANNIC ACID		A	A	A	A	B		A	A	A	A
TARTARIC ACID		B	A		A	A		B	A	A	A

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TETRAHYDROFURAN	C		A	C	C	C	A	C	A	C	C
TOLUENE	C	B	A	C	C	C	A	C	A	C	B
TRIBUTYLPHOSPHATE			A		C			C	A	C	C
TRICHLOROETHYLENE	C	C	C	C	C	B	B	C	A	C	A
TRICRESYLPHOSPHATE			A	B	C	C		A	A	C	A
TRIETHANOLAMINE	C	C	A	C	A			A	A	A	C
TRISODIUM PHOSPHATE SOLUTION		A		B	A	A		A	A	A	A
TUNG OIL		B			A			C	A	A	A
TURPENTINE	C		A	C	C	C		C	A	C	A
V											
VARNISH		B			C			C	A	C	C
W											
WATER	A	A	A	C	A	A	A	A	A	A	A
X											
XYLENE	C	A	A	C	C	C	A	C	A	C	A
Z											
ZINC	A	A	A	C	A		B	A	A	A	A

