Chemical Resistance Guide

All test were carried out at 20°C (+/-5), based on specimens having a minimum dry film thickness of 400 microns for 310 Chemical Resistant Coating and having been cured for a minimum period of 7 days at 20°C.

E Denotes EXCELLENT chemical resistance on long term immersion basis (typically 5-10 years)

VG Denotes VERY GOOD chemical resistance on a continuous immersion basis (typically 2-5 years)

G Denotes GOOD chemical resistance on a continuous immersion basis (typically 1-2 years)

M Denotes MODERATE chemical resistance on a continuous immersion basis (typically 6 months – 1 year)

F Denotes FAIR chemical resistance on a continuous immersion basis (typically 1-6 months)

S Denotes resistance to SPLASHES and occasional SPILLAGES

NR Denotes NOT RESISTANT, rapid failure being expected

Note that although these tables may be used for guidance purposes, caution must be exercised when more than one chemical is involved and/or temperatures are higher than ambient.

Please contact our Technical department for any specific advice.

The data is given freely and in good faith, however no guarantee is either offered or implied. E J Rawlins & Company Limited will accept no liability for work carried out with its products.

Chemical Resistance List
Section 1

ACIDS

Chemical	Concentration	Rating
Acetic acid	5%	E
Acetic acid	10%	E
Citric acid	30%	E
Formic acid	10%	VG
Lactic acid	10%	VG
Tartaric acid	20%	E
Oxalic acid	10%	E
Chromic acid	10%	VG
Chromic acid	20%	G
Hydrochloric acid	10%	E
Hydrochloric acid	20%	E
Hydrochloric acid	37%	E
Hydrofluoric acid	10%	M
Nitric acid	10%	G
Nitric acid	30%	M
Oleum (fuming Sulphuric acid)		S
Phosphoric acid	20%	E
Phosphoric acid	75%	E
Phosphoric acid	100%	E
Sulphuric acid	50%	E
Sulphuric acid	70%	E
Sulphuric acid	85%	E
Sulphuric acid	96-99%	E

Chemical Resistance List
Section 2

ALKALIS AND INORGANIC SALTS

Chemical	Concentration	Rating
Ammonium Carbonate	All	E
Ammonium Chloride	All	E
Ammonium Hydroxide	10%	E
Ammonium Hydroxide	25%	E
Ammonium Nitrate	All	E
Ammonium Sulphate	All	E
Calcium Hydroxide	All	E
Ferric Chloride	All	E
Magnesium Silico – Fluoride	All	VG
Magnesium Sulphate	Saturated	E
Potassium Chloride	All	E
Potassium Nitrate	All	E
Sodium Bisulphite	Saturated	E
Sodium Chlorate	All	E
Sodium Dichromate	50%	E
Sodium Hypochlorite	16%	VG
Sodium Hydroxide	20%	E
Sodium Hydroxide	50%	E
Sodium Sulphate	Saturated	E
Sodium Sulphide	All	E
Sodium Sulphite	All	E
Sodium Thiocyanate	57%	E
Sodium Thiosulphate	All	E
Stannic Chloride	All	E
Zinc Chloride	70%	E
Zinc Sulphate	All	E

Chemical Resistance List
Section 3

SOLVENTS

Chemical	Concentration	Rating
Acetone	10%	M
Acetone	100%	S
n-Butanol		E
2 – Butoxy Ethanol		G
Carbon Tetrachloride		G
Dowanol PM		E
Ethanol	10%	E
Ethanol	98%	VG
Ethyl Acetate		F
Ethylene Glycol		E
Isopropanol		E
Methanol		VG
Methylene Chloride		NR
Methyl Ethyl Ketone		VG
Petroleum Naphtha (heavy aromatic)		E
Toluene		VG
1,1,1-Trichloroethane		VG
Turpentine		E
Xylene		E

Chemical Resistance List
Section 4

MISCELLANEOUS

Chemical	Concentration	Rating
Cashew Nut oil		E
Castor oil		E
Chlorine gas		VG
Chlorine water	Saturated	VG
Crude oil		E
Diesel		E
Formaldehyde	35%	M
Glycerine		E
Hydrogen Peroxide	30%	M
Hydrogen Sulphide	100%	VG
Jet Fuel		E
Kerosene		E
Milk		E
Motor oil		E
2-Nitropropane		G
Olive oil		E
Ozone		VG
Palm oil		E
Petrol		E
Sea Water		E
Skydrol		E
Soy Sauce		E
Styrene		S
Urea	50%	VG
Whey		VG