

MANULI HYDRAULIC HOSES FLUID COMPABILITY CHART

FLUID	Textile Braided R6, 2TE, 3TE	Wire Braided		Wire Spiralled 4SP, 4SH, R15
		R5, 1SN, 2SN	1ST EQ	
Acetaldehyde	F	F	F	F
Acetic Acid, 10%	F	F	G	F
Acetic Acid, 25%, 100 °C	F	F	F	F
Acetic Acid glacial	F	F	F	F
Acetone	F	F	F	F
Air (80 °C)	G	G	E	G
Air (100 °C)	F	F	E	G
Air (150 °C)	C	C	E	C
Ammonia, gaseous	E	E	G	G
Ammonia, liquid	G	G	F	F
Ammonia Hydroxide, 10 °C	G	G	E	E
Ammonia Hydroxide, conc	F	F	E	E
Ammonium Nitrate (aqueous solutions)	G	G	G	G
Ammonium Phosphate (aqueous solutions)	E	E	E	E
Ammonium Sulphate (aqueous solutions)	E	E	E	E
Aniline	F	F	F	F
Aqua Regia	F	F	C	F
ASTM Oil No.1, 100 °C	E	E	E	E
ASTM Oil No.2, 100 °C	E	E	G	G
ASTM Oil No.3, 100 °C	E	E	F	F
Benzene	F	F	C	C
Boric Acid 10%, 100 °C	E	E	E	E
Brake Fluid (SAE J 1703d)	C	C	G	-
Butanol	E	E	E	E
Calcium Bicarbonate	E	E	E	E
Calcium Hydroxide (aqueous suspensions)	E	E	E	E
Carbonic Anhydride	G	G	G	G
Chlorine	F	F	G	F
Chloroform	F	F	F	F
Citric Acid, 33%	G	G	G	G
Crude Oil	E	E	F	F
Dybenzil Ether	C	C	C	C
Dibutyl Phtalate (DBP)	F	F	C	C
Diesel Fuel (70 °C)	E	G	F	G
Diesel Fuel Bio RME	E	F	C	C
Epichlorhydrine	C	C	C	C
Ethyl Acetate	F	F	F	C
Ethyl Alcohol	E	E	E	E
Ethyl Ether (70 °C)	G	G	-	F
Ethylene	E	E	-	E
Ethylene Glycole	E	E	G	E
Ethylene Glycole (100 °C)	E	E	G	G
Formaldehyde	F	F	F	G
Formic Acid 23 °C (saturated solution)	G	G	G	G
Formic Acid 75 °C (saturated solution)	F	F	F	F
Fuel A (iso-octane)	E	E	G	G
Fuel B (70% iso-octane, 30% toluene)	E	G	F	F
Fuel C (50% iso-octane, 50% toluene)	G	F	C	C
Glycerine	E	E	E	E
Heptane	E	E	F	F
Hydrochloric Acid, 10%	G	G	G	G
Hydrochloric Acid, 37%	G	G	G	F

Hydrochloric Acid, 37%, 70 °C	C	C	C	C
Hydrocyanic Acid, 20%	F	F	-	F
Hydrogen Sulphide	C	C	F	G
Isobutyl Alcohol	G	G	E	E
Isopropyl Alcohol	G	G	E	E
Iso-octane	E	E	G	G
Kerosene (aromatics 40% max, 70 °C)	E	G	F	F
Lead Free Petrol	E	E	F	G
Magnesium Hydroxide (aqueous solutions)	G	G	E	E
Mercury	E	E	E	E
Methanol	G	G	E	E
Methyl Methacrylate	C	C	C	C
Methylethylketone (MEK)	C	C	F	F
Nitric Acid (concentrated 65%)	C	C	F	C
Nitric Acid (diluted 10%, 50 °C)	F	F	F	C
Nitric Acid (fuming)	C	C	C	C
Nitrogen	G	G	G	G
Oleic Acid	F	F	G	F
Oleum	G	G	F	F
Oxalic Acid 25%, 80 °C	G	G	G	G
Oxygen 80 °C	F	F	E	G
Paraffin	E	E	E	E
Pentane	E	E	F	F
Petrol	E	E	F	F
Petroleum	E	E	F	G
Phenol	C	C	C	F
Phosphoric Acid 20%	G	G	F	F
Phosphoric Acid 60% 50 °C	F	F	C	C
Phosphoric Acid 85%	F	F	C	C
Phosphorous Tri-chloride	C	C	C	C
Picric Acid 10% 100 °C	F	F	G	F
Potassium Chloride (aqueous solutions)	E	E	E	E
Potassium Hydroxide 70 °C (medium high concentration)	G	G	E	G
Potassium Sulphate (aqueous solutions)	E	E	E	E
Sea Water	E	E	F	E
Soaps	E	E	G	G
Soda	G	G	G	G
Sodium Bicarbonate	E	E	E	E
Sodium Chloride (aqueous solutions)	E	E	E	E
Sodium Hydroxide	F	F	G	G
Sodium Hydroxide 70 °C (medium high concentration)	F	F	G	G
Sodium Hypochlorite (aqueous solutions)	F	F	G	G
Sodium Silicate (aqueous solutions)	E	E	E	E
Sodium Sulphate (aqueous solutions)	E	E	E	E
Sodium Sulphide	E	E	E	E
Stearic Acid	E	E	E	E
Sulphur	G	G	G	G
Sulphure Dioxide	C	C	C	C
Sulphuric Acid (hot cocentrated 96 °C)	C	C	C	C
Sulphuric Acid (diluted 20 °C)	C	C	F	C
Sulphurous Anhydride	C	C	F	F
Sulphurous Acid	C	C	F	C
Tannic Acid	F	F	G	G
Tannin	E	E	E	E
Tartaric Acid 20%	E	E	G	G
Tetraethyl Lead	G	G	F	G
Toluene	F	F	C	C
Turpentine	G	G	C	C

Urea	E	E	G	E
Vinyl Acetate	E	E	E	E
Vinyl Chloride	C	C	C	C
Water	E	E	F	E
Xylene	F	F	C	C
Zinc Chloride (aqueous solutions)	E	E	E	E
Zinc Sulphate (aqueous solutions)	E	E	E	E

Legenda

Rating		Change of compound properties	Consequences
E	Excellent	Small or negligible	No problem for use
G	Good	Minor	Product certification to standard qualification needed
F	Fair	Significant	Product validation under simulated or actual working conditions needed
C	Conditional	Significant	Use is not recommended