

FLUIDS	Materials of valve body							Non metallic materials for seals	
	Brass	Cast iron	Carbon steel	Stainless steel AISI 316	Rigid PVC	Neoprene	Viton	PTFE (Teflon)	
O : Optimum									
G : Good									
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NOTE : All the fluides are at ambient temperature unless otherwise indicated.									
Acetaldeidhyde	N	I	I	O	N	N	I	O	
Acetic acid	I	I	I	O	I	N	N	O	
Acetic anhydride	I	N	N	G	N	I	N	O	
Acetic solvents	O	G	O	O	N	N	N	O	
Acetone	O	O	O	O	N	I	N	O	
Acetylene	I	O	O	O	G	O	O	O	
Acrylonitrine	O	I	O	O	-	N	I	O	
Air	O	O	O	O	O	O	O	O	
Alum	I	I	I	O	-	O	O	O	
Aluminium chloride (dry)	G	G	G	O	I	G	O	O	
Aluminium sulphate	I	I	I	O	I	O	O	O	
Ammonia solution	N	G	G	O	N	G	-	O	
Ammonium bicarbonate	G	G	I	G	-	O	O	O	
Ammonium carbonate	G	G	G	G	G	O	G	O	
Ammonium chloride	N	N	N	I	G	O	O	O	
Ammonium monophosphate	N	N	N	G	G	O	O	O	
Ammonium nitrate	N	N	N	O	-	O	O	O	
Ammonium phosphate(dibasic)	I	N	N	G	-	O	O	O	
Ammonium phosphate(tribasic)	I	N	N	G	G	O	O	O	
Ammonium sulphate	G	I	I	G	I	O	O	O	
Amyl acetate	G	I	I	G	N	N	N	O	
Amyl alcotol	G	I	G	O	G	O	O	O	
Anhydrous ammonia	N	G	O	O	G	G	I	O	
Anhydrous nitric acid	N	O	O	O	N	N	-	O	
Aniline	I	I	I	G	N	I	I	O	
Aniline (colouring)	I	I	I	O	N	G	G	O	
Aniline oil	O	O	O	O	G	G	-	O	
Antimony trichloride	N	N	N	N	G	I	O	O	
Arsenic acid	N	N	N	G	I	O	O	O	
Asphalt	O	G	G	O	G	G	O	O	
Barium hydroxide	G	G	I	G	G	O	O	O	
Barium sulphate	I	I	I	G	G	O	O	O	
Beer	O	N	N	O	O	O	O	O	
Benzaldehyde	O	G	O	O	N	N	N	O	
Benzoic acid	G	N	N	G	G	O	O	O	
Benzol or benzene	G	G	G	G	N	N	G	O	
Borax	O	I	I	G	-	O	O	O	
Boric acid	G	N	N	G	G	O	O	O	
Brine	G	I	I	G	G	O	O	O	
Bromine (dry)	O	N	N	N	N	N	G	O	
Bromine (wet)	G	N	N	N	N	N	G	O	
Butadiene	I	G	G	O	G	I	O	O	
Butane	O	G	G	G	G	G	O	O	
Butyl alcohol	G	I	G	O	I	O	O	O	
Butylene	O	O	O	O	I	N	-	O	
Butyric acid	I	N	N	G	N	I	I	O	
Calcium bisulphate	G	N	N	G	G	O	O	O	
Calcium carbonate	I	N	N	G	O	O	O	O	
Calcium chloride	G	I	I	G	O	O	O	O	
Calcium hypochlorite	N	N	N	I	-	G	O	O	
Calcium sulphate	I	I	I	G	G	O	O	O	
Carbon dioxide CO2	O	G	O	O	G	G	O	O	

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Carbon sulphide	I	G	G	G	N	N	O	O	
Carbon tetrachloride (sec)	I	G	G	O	N	N	G	O	
Carbon tetrachloride (wet)	N	N	N	G	N	N	G	O	
Carbonated water	G	G	G	O	G	O	O	O	
Carbonic acid	N	N	N	G	G	O	O	O	
Castor oil	O	G	G	O	G	G	O	O	
Chlorinated solvents (dry)	I	I	I	G	-	N	I	O	
Chlorinr (wet)	N	N	N	N	I	N	-	O	
Chloro-gas (dry)	I	G	G	G	I	I	G	O	
Chloroacetic acid	I	N	N	I	I	I	O	O	
Chlorobenzene (dry)	G	G	G	O	N	N	O	O	
Chloroform (dry)	G	G	G	O	N	N	G	O	
Chlorosulphonic acid (dry)	G	G	G	G	N	N	-	O	
Chlorosulphonic acid (wet)	N	N	N	N	N	N	-	O	
Chrome alum	I	G	G	O	G	G	-	O	
Chromic acid	N	N	N	I	G	N	I	O	
Coconut oil	G	I	I	G	G	G	O	O	
Cokeoven gas	I	G	G	G	G	I	G	O	
Cooling oil	G	G	G	O	G	G	O	O	
Copper acetate	N	N	N	O	-	-	-	O	
Copper chloride	N	N	N	I	G	O	O	O	
Copper nitrate	N	N	N	G	O	O	O	O	
Corn oil	G	I	I	G	G	G	O	O	
Cottonseed oil	G	I	I	G	G	G	O	O	
Creosote oil	G	G	G	G	-	N	O	O	
Cresylic acid	I	N	I	G	G	N	G	O	
Crude oil (sour)	I	I	G	O	-	G	O	O	
Crude oil (sweet)	G	G	G	O	-	G	O	O	
Cupric sulphate	N	N	N	G	I	O	O	O	
Cyclohexane	O	G	O	O	N	N	O	O	
Diethylamide	O	G	O	O	-	I	-	O	
Distilled water (aerated)	O	N	N	O	O	O	O	O	
Drying oil	I	G	I	G	-	G	-	O	
Edible vegetable oil	G	G	G	O	G	G	O	O	
Epsom salt	G	I	I	G	-	O	O	O	
Ethane	O	G	G	G	-	G	O	O	
Ethers	G	G	O	O	N	I	I	O	
Ethyl acetate	I	I	G	G	N	N	N	O	
Ethyl acrylate	G	I	I	O	N	-	N	O	
Ethyl alcohol	G	G	G	G	O	O	O	O	
Ethyl chloride (dry)	G	G	G	O	N	I	-	O	
Ethyl chloride (wet)	I	N	N	G	N	I	-	O	
Ethlen glycol	G	G	G	G	G	O	O	O	
Ethylene oxide	O	G	G	G	-	N	N	O	
Ethylene perchlorine (dry)	I	G	G	O	-	N	O	O	
Ferric nitrate	N	N	N	I	G	O	O	O	
Ferric sulphate	N	N	N	G	G	O	O	O	
Ferrous chloride	N	N	N	N	G	O	O	O	
Ferrous sulphate	G	N	N	G	I	O	O	O	
Ferrous sulphate (saturated)	I	I	I	O	G	I	-	O	
Fertilizer solutions	I	I	G	G	-	G	O	O	
Fish oil	G	G	G	O	-	G	O	O	

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Fluorine (dry)	N	N	N	N	I	-	-	O	
Formaldehyde (cold)	O	G	O	O	-	G	-	O	
Formaldehyde (hot)	G	N	N	I	-	G	-	O	
Formic acid (cold)	G	N	N	G	I	O	-	O	
Formic acid (hot)	G	N	N	G	N	-	-	O	
Freon (dry)	G	G	G	O	I	I	I	O	
Fruit juices	G	N	N	O	G	O	O	O	
Fuel oil	G	G	G	O	G	G	O	O	
Furfural	O	G	O	O	N	I	N	O	
G.A. Solvents	O	G	G	O	N	-	-	O	
Gallic acid	I	N	N	G	G	-	-	O	
Gas hydrogen (cold)	G	G	G	O	G	G	-	O	
Glucose	O	G	G	O	O	O	O	O	
Glue	G	O	O	G	-	O	O	O	
Glycerin	G	G	G	O	O	O	O	O	
Glycols	G	G	G	G	G	O	O	O	
Heptane	O	G	G	O	G	G	O	O	
Hexane	G	G	G	G	I	I	O	O	
Hydraulic oil (petroleum base)	G	G	O	O	-	G	O	O	
Hydrobromic acid	N	N	N	N	I	I	-	O	
Hydrochloric acid (aerated)	N	N	N	N	G	I	-	O	
Hydrocyanic acid	N	I	I	O	G	G	-	O	
Hydrofluoric acid	N	N	N	N	I	I	-	-	
Hydrofluosillicic acid	O	N	N	I	I	O	-	O	
Hydrogen peroxide (concentrated)	N	N	N	G	-	N	-	O	
Hydrogen peroxide (diluted)	G	N	N	G	-	O	O	O	
Hydrogen sulphide (dry)	I	G	G	O	-	O	O	O	
Hydrogen sulphide (wet)	N	N	I	G	-	O	O	O	
Ink	I	N	N	O	-	O	O	O	
Iodine (wet)	N	N	N	N	N	G	O	O	
Iodoform	I	I	G	O	N	-	O	O	
Isoctane	O	G	O	O	-	I	O	O	
Isopropyl alcohol	G	G	G	G	-	I	O	O	
Isopropylic ether	O	G	O	O	N	I	-	O	
Jelly	O	N	N	O	G	O	O	O	
Kerosene	O	G	G	O	G	I	O	O	
Ketone	O	O	O	O	-	N	N	O	
Lacquers (and solvents)	O	I	I	O	-	N	N	O	
Lactic acid	N	N	N	O	O	O	-	O	
Lead acetate	I	N	N	G	G	O	O	O	
Lemon juice	G	N	N	G	G	O	O	O	
Lighting gas	O	O	O	O	N	G	O	O	
Linolenic acid	G	G	G	O	G	G	O	O	
Linseed oil	G	O	O	G	O	G	O	O	
Liquid gas (LPG)	O	G	G	G	-	G	O	O	
Liguor ammonia	N	O	O	O	I	G	O	O	
Lubricating oil	G	O	O	O	-	G	O	O	
Magnesium bisulphate	G	G	G	O	-	-	-	O	
Magnesium chloride	G	N	I	G	O	O	O	O	
Magnesium sulphate	G	G	G	G	I	O	O	O	
Maleic acid	G	N	G	G	G	O	O	O	
Malic acid	G	N	N	G	G	O	O	O	

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Mercuric chloride	N	N	N	I	G	O	-	O	
Mercuric cyanide	N	N	N	O	G	-	-	O	
Mercury	N	O	O	O	G	O	O	O	
Methane (metan)	O	G	G	G	G	G	O	O	
Methyl acetate	O	G	G	O	-	N	N	O	
Methyl alcolol	G	G	G	G	O	O	G	O	
Methyl chloride	O	G	G	O	N	I	-	O	
Methyl ethyl ketone	O	O	O	O	N	N	N	O	
Methyl formate	O	I	I	G	-	G	-	O	
Methylamine	N	G	G	O	-	-	-	O	
Methylene chloride	O	G	G	O	N	N	I	O	
Milk	O	N	N	O	O	O	O	O	
Mineral oil	G	G	G	O	-	G	O	O	
Muds	G	G	G	O	-	O	O	O	
Muriatic acid	N	N	N	N	-	G	O	O	
Naphtha	G	G	G	G	G	I	O	O	
Naphthalene	G	G	O	G	N	N	O	O	
Natural gas	G	G	G	O	G	O	O	O	
Nickel chloride	N	N	N	G	O	O	O	O	
Nickel nitrate	N	N	N	G	O	O	O	O	
Nickel sulphate	N	N	N	G	I	O	O	O	
Nicotinic acid	O	G	G	O	G	-	-	O	
Niter cake 10%	G	N	N	O	-	O	O	O	
Nitric acid 10%	N	N	N	O	G	G	O	O	
Nitric acid 30%	N	N	N	O	G	I	O	O	
Nitric acid 80%	N	N	N	O	I	N	G	O	
Nitric acid 100%	N	O	O	O	N	N	G	O	
Nitrobenzene	N	G	G	G	N	N	I	O	
Nitrogen	O	O	O	O	G	O	O	O	
Nitrogen oxide	N	I	G	G	-	G	-	O	
Nitrogen gas	N	I	G	O	G	-	-	O	
Oil-water blend	O	G	G	O	-	G	O	O	
Oleic acid	G	I	I	G	G	I	O	O	
Oleum	G	I	G	G	I	I	I	O	
Olive oil	G	G	G	O	G	G	O	O	
Oxalic acid	G	N	N	G	I	O	O	O	
Oxygen	O	G	G	O	G	-	-	O	
Ozone (dry)	G	I	I	O	I	-	-	O	
Ozone (wet)	O	O	O	O	I	-	-	O	
Palm oil	G	I	I	G	G	G	O	O	
Palmitic acid	G	I	I	G	I	G	O	O	
Paraffin (gazyagi, petrol)	O	G	G	O	-	G	O	O	
Paraformaldehyde	G	G	G	G	-	G	-	O	
Pentane	O	G	O	O	-	G	O	O	
Petrol	O	G	O	O	G	N	O	O	
Phenol	G	N	N	G	-	N	G	O	
Phosphoric acid 10% (cold)	N	N	N	G	G	O	O	O	
Phosphoric acid 10% (hot)	N	N	N	N	I	O	O	O	
Phosphoric acid 50% (cold)	N	N	N	G	G	G	O	O	
Phosphoric acid 50% (hot)	N	N	N	N	I	G	O	O	
Phosphoric acid 85% (cold)	N	G	G	O	G	G	-	O	
Phosphoric acid 85% (hot)	N	I	I	O	I	G	-	O	

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Phthalic acid	G	I	I	G	-	I	O	O	
Phthalic anhydride	G	I	I	G	-	I	O	O	
Picric acid	G	N	N	G	I	O	-	O	
Pine oil (Terebentin yağı)	G	G	G	O	-	I	O	O	
Potassium bichromate	N	I	I	G	I	O	O	O	
Potassium bisulphate	I	N	N	G	G	O	O	O	
Potassium bromide	I	N	N	O	G	O	O	O	
Potassium carbonate	G	G	G	G	G	O	O	O	
Potassium chlorate	G	G	G	G	I	O	O	O	
Potassium chloride	G	G	I	I	G	O	O	O	
Potassium cyanide	N	G	G	G	I	O	O	O	
Potassium diphosphate	G	O	O	O	G	O	O	O	
Potassium ferrocyanide	G	I	I	G	G	O	O	O	
Potassium iodide	N	I	I	G	-	O	O	O	
Potassium nitrate	G	G	G	G	-	O	O	O	
Potassium permanganate	G	G	G	G	G	O	O	O	
Potassium sulphate	G	I	G	G	-	O	O	O	
Potassium sulphide	G	G	G	O	-	-	-	O	
Propane	O	G	G	G	I	G	O	O	
Propyl alcohol	O	G	O	G	I	-	O	O	
Propylene glycol	G	G	G	G	-	O	O	O	
Pyrogallic acid	G	G	G	G	-	O	O	O	
Resins	O	I	I	O	I	I	-	-	
Rubber latex emulsions	O	G	G	O	-	-	O	O	
Rubber solvents	O	O	O	O	N	I	N	O	
Salicylic acid	I	N	N	O	-	O	O	O	
Seawater	G	N	N	O	G	O	O	O	
Shellac	O	G	O	O	-	O	-	O	
Silver nitrate	N	N	N	G	O	I	O	O	
Soap solutions (stearates)	O	G	O	O	I	O	O	O	
Sodium acetate	G	I	I	G	O	G	O	O	
Sodium aluminate	G	I	I	G	G	O	O	O	
Sodium bicarbonate	G	N	N	O	G	O	O	O	
Sodium bisulphate 10%	G	N	N	O	G	O	O	O	
Sodium borate	G	I	I	G	-	O	O	O	
Sodium bromide 10%	G	N	I	G	O	O	O	O	
Sodium carbonate	G	G	G	G	O	O	O	O	
Sodium chlorate	G	I	I	G	I	O	O	O	
Sodium chloride	G	I	I	G	I	O	O	O	
Sodium chromate	I	G	G	O	G	O	O	O	
Sodium cyanide	N	G	G	G	G	O	O	O	
Sodium fluorine	I	N	N	G	G	O	O	O	
Sodium hydrxide (cold)	O	O	O	O	O	O	G	O	
Sodium hydroxide (hot)	O	G	G	O	G	G	I	O	
Sodium hypochlorite	N	N	N	I	I	N	O	O	
Sodium metaphosphate	I	G	G	O	-	O	-	O	
Sodium metasilicate (cold)	G	I	I	O	-	O	-	O	
Sodium metasilicate (hot)	G	N	N	O	-	-	-	O	
Sodium nitrate	G	G	G	G	G	O	O	O	
Sodium perborate	G	G	G	G	O	O	O	O	
Sodium peroxide	N	I	I	G	-	O	O	O	
Sodium phosphate (dibasic)	I	I	I	G	O	O	O	O	

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Sodium phosphate (tribasic)	I	I	I	G	O	G	O	O	
Sodium silicate	G	G	G	G	-	O	O	O	
Sodium silicate (hot)	I	I	I	G	-	-	-	O	
Sodium sulphate	G	G	G	O	O	O	O	O	
Sodium sulphide	N	G	G	G	G	O	O	O	
Sodium sulphide (hot)	N	I	I	G	I	-	-	O	
Sodium thisulphate	G	G	G	O	-	O	O	O	
Solf water	O	I	I	O	O	O	O	O	
Sour gasoline	G	G	G	O	-	N	O	O	
Soybean oil	G	I	I	O	G	G	O	O	
Stannous chloride	N	N	N	I	I	O	O	O	
Starch	G	I	I	G	-	O	O	O	
Stearic acid	I	I	I	G	G	I	O	O	
Styrene	O	G	O	O	-	N	-	O	
Sulphur	N	I	I	G	-	-	-	O	
Sulphuric acid 0-7%	I	N	N	G	O	O	O	O	
Sulphuric acid 20%	I	N	N	N	G	G	O	O	
Sulphuric acid 50%	G	N	N	N	G	I	O	O	
Sulphuric acid 100%	O	G	G	O	I	N	G	O	
Sulphuric anhydride (dry)	G	G	G	O	I	N	-	O	
Sulphurous anhydride (dry)	G	G	G	O	G	I	O	O	
Synthesis gas	G	G	G	G	G	O	O	O	
Tanic acid	G	I	I	G	G	G	O	O	
Tar	O	O	O	O	G	I	O	O	
Tartaric acid	O	N	N	G	G	O	O	O	
Tetraethyl lead	G	I	I	G	I	-	-	O	
Tin tetrachloride	I	N	N	N	G	O	O	O	
Tuluol or toluene	O	O	O	O	N	N	G	O	
Tomatoe juice	I	I	I	O	G	O	O	O	
Transformer oil	G	G	O	O	-	G	O	O	
Tributyl phosphate	O	O	O	O	N	I	-	O	
Trichloroethylene	G	I	G	G	N	N	G	O	
Turpentine	G	G	G	G	I	N	O	O	
Urea	G	I	I	G	I	-	-	O	
Varnishes	O	I	I	O	-	O	-	O	
Vaseline	G	I	I	G	-	G	O	O	
Vegetable oil	G	G	G	O	G	G	O	O	
Vinegar	G	N	N	O	I	N	N	O	
Wax emulsions	O	G	O	O	G	G	O	O	
Waxes	O	O	O	O	-	G	O	O	
Wood oil	G	G	G	O	-	G	O	O	
Xylene chloride	O	G	O	O	N	N	G	O	
Zinc hydrosulphite	N	I	N	N	G	O	O	O	
Zinc sulphate	I	G	O	O	I	O	O	O	
10%NH3 solution in alcohol	G	G	G	G	-	I	O	O	