

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum	Brass	Cast iron	Carbon steel	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
G : Good								
I : Individual								
N : Not ideal								
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								
Carbon tetrachloride (sec)								
Carbon tetrachloride (wet)								
Carbonated water								
Carbonic acid								
Castor oil								
Chlorinated solvents (dry)								
Chlorinr (wet)								
Chloro-gas (dry)								
Chloroacetic acid								
Chlorobenzene (dry)								
Chloroform (dry)								
Chlorosulphonic acid (dry)								
Chlorosulphonic acid (wet)								
Chrome alum								
Chromic acid								
Coconut oil								
Cokeoven gas								
Cooling oil								
Copper acetate								
Copper chloride								
Copper nitrate								
Corn oil								
Cottonseed oil								
Creosote oil								
Cresylic acid								
Crude oil (sour)								
Crude oil (sweet)								
Cupric sulhate								
Cyclohexane								
Diethylamide								
Distilled water (aerated)								
Drying oil								
Edible vegetable oil								
Epsom salt								
Ethane								
Ethers								
Ethyl acetate								
Ethyl acrylate								
Ethyl alcohol								
Ethyl chloride (dry)								
Ethyl chloride (wet)								
Ethlen glycol								
Ethylene oxide								
Ethylene perchlorine (dry)								
Ferric nitrate								
Ferric sulphate								
Ferrous chloride								
Ferrous sulphate								
Ferrous sulphate (saturated)								
Fertilizer solutions								
Fish oil								

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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	-	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
Lacguers (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
Liquor 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 alcotol		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	G	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 (gazyağı, petrol)		O	G	G	O	-	G	O	O
Paraformaldehyde		G	G	G	G	-	G	-	O
Pentane		O	G	G	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

