FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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	N	I	I	I	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 sulhate	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

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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
Liguid 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

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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	G	O	G	I	-	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 metasillicate (cold)	G	I	I	O	-	O	-	O
Sodium metasillicate (hot)	G	N	N	O	-	-	-	O
Sodium nitrate	G	G	G	G	G	O	O	O
Sodum 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

FLUIDS	Materials of valve body					Non metallic materials for seals		
O : Optimum G : Good I : Individual N : Not ideal NOTE : All the fluides are at ambient temperature unless otherwise indicated.	Brass	Cast İron	Carbon steet	Stainless steel AISI 316	Rigif PVC	Neoprene	Viton	PTFE (Teflon)
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	G	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	G	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