



Chemical Compatability Chart

Classification	Chemical	Floatswitch Material									Gasket/Washer Material			
		Acetal	Brass	Buna	Nylon	Polypropylene	PPS	PVC	S/S 304	S/S 316	Viton	Nitrile	Silicone	EPDM
Organic Chemicals	Acetaldehyde	B2	A1	D5	C3	C4	A1	E5	A1	A1	E5	E5	C3	A1
Acids - Organic	Acetic Acid, concentrated (glacial)	D5	N/A	C3	E5	A2	A1	E5	E5	A1	D4	D5	B5	B2
Acids - Organic	Acetic Acid, dilute	B3	E5	B2	E5	A1	A1	A2	B2	A1	D4	C5	B3	A1
Organic Chemicals	Acetone (Dimethyl Ketone)	B4	A1	D5	A2	A1	A1	E5	A1	A1	D4	E5	C4	A1
Alkalis	Ammonia, Aqueous, dilute	B2	N/A	A1	C5	A1	B2	A2	A1	A1	B2	D5	B2	A1
Alkalis	Ammonium Hydroxide, concentrated	B2	E5	D5	E5	A1	D5	B2	A1	A1	C3	E5	B2	A1
Organic Chemicals	Amyl Acetate	B2	A1	D5	B3	C4	A1	E5	A1	A1	E5	E5	B2	A1
Organic Chemicals	Aniline	D4	E5	D5	D5	A2	A1	E5	A1	B2	B4	E5	B2	B2
Foodstuffs	Beer	A2	B2	A1	A1	A1	-	A2	A1	A1	A1	A1	A1	A1
Organic Chemicals	Benzene	C3	N/A	D5	B2	C4	A1	E5	B2	B2	D4	E5	E5	E5
Misc	Bleach	D5	N/A	D5	C4	B3	A1	D4	B2	B2	E5	C5	B3	B2
Alcohols	Butanol (Butyl Alcohol)	A1	N/A	A1	C3	A1	A1	C5	A1	A1	-	A-	D5	A1
Inorganic Chemicals	Calcium Hypochlorite	D5	N/A	C3	E5	B3	B2	D5	B2	B2	E5	E5	B3	B2
Organic Chemicals	Cellosolve (2-Ethoxy Ethanol)	-	-	-	-	-	A1	E5	A1	A1	-	C-	-	-
Organic Chemicals	Chloroform	E5	B2	D5	C5	D5	D5	E5	A1	A1	D5	E5	E5	E5
Acids - Organic	Citric Acid	B5	D5	A1	C5	A1	A1	A2	B2	A1	A1	A1	A1	A1
Inorganic Chemicals	Copper Nitrate	A2	D5	A1	A1	A1	A1	A2	A1	A1	A1	A2	A1	-
Inorganic Chemicals	Copper Sulphate	A1	D5	A1	A1	A1	A1	A2	B2	B2	A1	A2	A1	A1
Organic Chemicals	Cyclohexane	A1	A1	B2	A2	E5	A1	E5	A1	A1	D5	A1	E5	E5
Misc	Detergents	A1	A1	A1	B3	A1	A1	B2	A1	A1	B2	A1	A1	A1
Fuels / Oils	Diesel	A1	A2	A1	A2	C5	A1	-	A1	A1	B2	A1	D5	E5
Organic Chemicals	Dimethyl Phthalate	B4	-	-	-	-	D5	E5	-	-	-	E5	-	-
Fuels / Oils	Engine Oil	A1	A1	A1	A2	A2	A1	-	A1	A1	D5	B2	B3	E5
Alcohols	Ethanol (Ethyl Alcohol)	A1	A1	C3	C3	A1	A1	B4	A1	A1	B2	A-	C4	A1
Organic Chemicals	Ethyl Acetate	C4	B2	D5	A1	B2	A1	E5	B2	B2	E5	E5	E5	B2
Organic Chemicals	Ethylene Glycol (Antifreeze)	B3	B3	A1	B3	A1	A1	A2	B2	B2	B3	A1	A1	A1
Inorganic Chemicals	Ferric Chloride	D5	D5	A1	D5	A1	A1	A2	E5	E5	A1	A1	A1	A1
Organic Chemicals	Formaldehyde (Formalin)	A1	-	C3	B3	A1	A1	B4	C3	A1	B3	C5	A1	A1
Acids - Organic	Formic Acid (Methanoic Acid)	B5	D5	C3	E5	A1	A1	C3	B2	A1	E5	C5	B5	A1
Foodstuffs	Fruit Juice	B4	D5	A1	A1	A1	A1	A2	A1	A1	A1	A1	A1	-
Organic Chemicals	Glycerol (Glycerin)	A1	B2	A1	B4	A1	A1	A2	A1	A1	A1	A1	A1	A1
Fuels / Oils	Hydraulic Fluid	B-	A1	A1	-	-	A1	-	A1	A1	B-	A-	-	E5



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Acids - Inorganic	Hydrochloric Acid, concentrated	E5	D5	D5	E5	B4	C4	A2	E5	E5	B2	C5	E5	E5
Acids - Inorganic	Hydrochloric Acid, dilute	E5	D5	D5	C5	B2	B3	B2	E5	E5	A1	B4	C5	A1
Acids - Inorganic	Hydrofluoric Acid	E5	-	D5	E5	E5	E5	E5	E5	E5	B2	E5	E5	E5
Inorganic Chemicals	Hydrogen Peroxide, Concentrated	D5	D5	D5	E5	A5	E5	A2	B2	B2	B4	E5	B2	E5
Inorganic Chemicals	Hydrogen Peroxide, dilute	C5		D5	E5	A2	E5	A2	B2	B2	B3	D5	A1	A1
Fuels / Oils	Kerosene (Aviation Fuel)	A1	A1	A1	A2	C4	A1	C4	A1	A1	A1	A-	-	E5
Acids - Organic	Lactic Acid	B5	D5	A1	B3	A1	A1	C4	B2	B2	C5	B4	A1	A1
Fuels / Oils	Lubricating Oil	-	A1	A1	A2	A2	A1	-	A1	A1	-	B2	D5	E5
Alcohols	Methanol (Methyl Alcohol)	A1	A1	A1	C4	A1	A1	C4	A1	A1	C4	A1	B3	A1
Organic Chemicals	Methyl Ethyl Ketone (MEK)	D5	A1	D5	B3	B4	D5	E5	A1	A1	E5	E5	E5	A1
Organic Chemicals	Methylene Chloride	E5	A1	D5	D5	D5	D5	E5	B2	B2	E5	E5	E5	C3
Fuels / Oils	Mineral Oil / Fuel Oil	A1	A1	A1	A2	A2	A1	B4	A1	A1	A2	A2	B3	E5
Acids - Inorganic	Nitric Acid, concentrated	E5	D5	D5	E5	C5	E5	C5	A1	A1	D5	E5	E5	E5
Acids - Inorganic	Nitric Acid, dilute	E5	D5	D5	E5	A1	C4	B5	A1	A1	C5	D5	D4	A1
Organic Chemicals	Nitrobenzene	B4	-	D5	D5	A1	A1	E5	B2	B2	A1	E5	E5	B2
Organic Chemicals	Nitromethane	-	-	D5	A2	-	A1	-	A1	A1	-	E5	-	B2
Foodstuffs	Olive Oil	B5	-	D5	B2	A1	-	A2	A1	A1	C4	A2	A2	E5
Organic Chemicals	Perchloroethylene	B5	-	C3	-	-	A1	-	B2	A1	B3	D-	-	E5
Fuels / Oils	Petrol (Gasoline)	A1	A1	A1	A2	C4	A1	B4	A1	A1	B2	A2	D5	E5
Acids - Inorganic	Phosphoric Acid, concentrated	D5	D5	D5	E5	A1	A1	A2	E5	E5	B3	D5	C4	B2
Acids - Inorganic	Phosphoric Acid, dilute	B5	D5	D5	E5	A1	A1	A2	E5	C4	B2	C4	B2	B2
Inorganic Chemicals	Potassium Chloride	A1	D5	A3	B3	A1	A1	A2	B2	A1	A1	A1	A1	A1
Inorganic Chemicals	Potassium Cyanide	-	D5	A3	-	A1	A1	A2	B2	B2	-	A-	-	A1
Inorganic Chemicals	Potassium Nitrate	A2	B2	A2	A2	A1	A1	A2	B2	B2	A1	A1	A1	A1
Alcohols	Propanol (IPA)	A1	A1	B2	-	A1	A1	-	B2	B2	C5	B-	D5	A1
Inorganic Chemicals	Silver Nitrate	B4	-	A3	A2	A2	A1	A2	B2	B2	A1	B2	A1	A1
Misc	Soaps	A1	B2	A1	B3	A1	A1	A2	A1	A1	-	A1	-	A1
Inorganic Chemicals	Sodium Bicarbonate	A1	D5	A3	B3	A1	A1	A2	A1	A1	A1	A1	A1	A1
Inorganic Chemicals	Sodium Chloride	A1	D5	A1	B3	A1	A1	A2	B2	B2	A1	A1	A1	A1
Inorganic Chemicals	Sodium Cyanide	-	D5	A1	-	A1	A1	A2	A1	B2	-	A-	-	A1
Alkalis	Sodium Hydroxide, concentrated	B2	D5	A3	E5	A1	C4	A2	C3	B2	D5	C4	C4	B2
Alkalis	Sodium Hydroxide, dilute	A1	B2	A1	C5	A1	A1	A2	B2	B2	D5	B3	B3	B2



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		Acetal	Brass	Buna	Nylon	Polypropylene	PPS	PVC	S/S 304	S/S 316	Viton	Nitrile	Silicone	EPDM
Inorganic Chemicals	Sodium Nitrate	A1	-	A3	B3	A1	A1	A2	B2	B2	A1	A1	A1	A1
Acids - Inorganic	Sulphuric Acid, concentrated	E5	-	C3	E5	D5	D5	E5	C3	B3	A2	E5	E5	C5
Acids - Inorganic	Sulphuric Acid, dilute	C5	-	A3	E5	A2	A1	B3	E5	B2	A2	D5	C5	B2
Organic Chemicals	Toluene	A1	A1	D5	A2	D4	A1	E5	A1	A1	E5	E5	E5	E5
Organic Chemicals	Trichloroethylene	D4	-	D5	A3	D4	-	E5	B2	B2	D5	D5	E5	E5
Misc	Turpentine	-	D5		-	D4	A1	-	A1	A1	D5	A-	E5	E5
Misc	Urine	A1	-	A3	B3	A1	A1	A2	A1	A1	A1	A-	A1	A1
Foodstuffs	Vegetable Oil	B2	-	A2	A2	A1	A1	B2	A1	A1	B2	A2	A2	E5
Misc	Water	A2	A1	A1	B3	A1	A1	A2	A1	A1	A2	A1	A1	A1
Foodstuffs	Whiskey	-	B2	A1	-	A1	-	-	A1	A1	-	A-	-	A1
Foodstuffs	Wine	-	B2	A1	-	A1	-	-	A1	A1	-	A-	-	A1
Organic Chemicals	Xylene	A1	A1	D5	A2	D4	A1	E5	B2	B2	E5	E5	E5	E5

Notes:

All chemical compatibility ratings are for reference only, and are based on the data available. Trials should always be carried out in any cases of doubt, using conditions which closely match the actual application.

Commercial and proprietary fluids may contain additives to improve end use characteristics. Whilst the material may be compatible with the base chemical, the additives can sometimes have an adverse effect. Trials should be conducted in cases of doubt.

A to E are cold compatibility ratings. A is best, B is likely to be compatible, C & D should be tested, E is incompatible.

1 to 5 are hot compatibility ratings. 1 is best, 2 is likely to be compatible, 3 & 4 should be tested, 5 is incompatible.

"-" means no data available - refer to Cynergy3 Components Engineering or Quality Department.

Red denotes float switch materials, blue denotes gasket materials.

Chemical compatibility data assumes that no fluid comes into contact with either the locking nut (where applicable), the wires, or the potting material used to secure the switch element.

Gaskets can sometimes be used even where their rating is poor, if they are not in permanent contact with the fluid. Consideration should be given to the effect of any vapour on the material.

Trials should be conducted in cases of doubt.