

# Body Material Selection Table

The selection of appropriate body material for CUPLA is closely related to its usage application, the type of fluid run through, its concentration (%), the pressure, its working environment, etc. So the material must be carefully considered in order to use CUPLA efficiently and obtain its full performance. Since there are some body materials that should not be used with certain fluids, please refer to this table when making your selection.

○:Suitable    △:Not suitable under certain conditions    ×:Unsuitable

	Fluids	Brass	Stainless Steel	Steel	Aluminum	Polypropylene	
A	Acetic acid	×	○		×	△	
	Acetic anhydride	×	○		△	○	
	Acetone	○	○	○	○	△	
	Air	○	○	○	○	○	
	Aluminum fluoride	○	×			○	
	Aluminum chloride	×	×		×	○	
	Aluminum sulfate	×	○			○	
	Ammonia	×	○		×	○	
	Ammonium nitrate	×	○			○	
	Ammonium phosphate	△	○		×	○	
	Ammonium sulfate	△	△		○	○	
	Aniline	×	○		○	△	
	Arsenic acid	△	○		△	○	
	B	Barium chloride	×	×			○
Barium hydroxide		×	○		×	○	
Barium sulfide			○	○		○	
Beer		○	○	△	○	○	
Benzene		×	○	○	○	△	
Benzine		○	○	○	○	△	
Boric acid		△	○		×	○	
Butane		○	○	○		○	
Butyl acetate		○	○	○	○	△	
C		Calcium chloride	○	△		△	○
		Calcium hydroxide	○	○	○	×	○
		Carbon dioxide	○	○	○	○	○
		Carbon disulfide	○	○	○		×
		Carbon tetrachloride	△	○		×	×
	Carbonic acid	○	○	○	○	○	
	Chlorine		×			×	
	Chromic acid	×	×		×	×	
	Citric acid	△	○		△	○	
	Cresol acid	○	○	○	△	○	
	D	Diesel fuel	○	○	○	○	△
		Dowtherm		○			
		Drinking water	△	○			○
	E	Ethanol	○	○	○	○	○
Ether		○	○	○	○	△	
Ethyl acetate		△	○	△	△	△	
Ethylene chloride							
Ethylene glycol		○	○	○	○	○	
F	Fatty acid	△	○			×	
	Ferric chloride	×	×		×	○	
	Ferric sulfate	×	△			○	
	Formaldehyde 40%	△	○		△	○	
	Formic acid	×	○		×	○	
	Freon	○	○	○	○	×	
G	Glycerine	○	○	○	○	○	

	Fluids	Brass	Stainless Steel	Steel	Aluminum	Polypropylene	
H	Hexane	○	○		○	△	
	Hydrobromic acid		×		×	○	
	Hydrochloric acid	×	×	×	×	○	
	Hydrofluoric acid	△	×		×	○	
	Hydrogen	○	○	○	○	○	
	Hydrogen peroxide	×	○			○	
	Hydrogen sulfide	△	△			○	
	I	Industrial water	○	○	△		
	J	Jet fuel		○	△		
L	Lactic acid	×	○		×	○	
	Liquefied petroleum gas (LPG)	○	○	○	○	○	
M	Magnesium chloride	×	×		△	○	
	Mercury	×	○	○		○	
	Methyl alcohol	○	○	○	○	○	
N	Naphtha	○	○	○	○	△	
	Naphthalene	○	○	○	○	○	
	Natural gas	○	○	○	○	○	
	Nickel chloride	×	×			○	
	Nitric acid	×	△		×	△	
	Nitrobenzene	△	○	○		×	
O	Octane						
	Oxygen	○	○	○		○	
P	Paraffin	○	○	○			
	Phenol	△	○			○	
	Phosphoric acid	×	○		×	○	
	Potassium chloride	△	△		×	○	
	Potassium hydroxide	△	○		×	○	
	Pure water	△	○			○	
	R	Refined gasoline	○	○	○	○	○
Refined petroleum		○	○	○	○	○	
S	Salt water	×	△	×	×	○	
	Sodium carbonate	○	○	○	△	○	
	Sodium chloride	△	△	×	×	○	
	Sodium hydroxide (Caustic soda)		△		×	○	
	Sodium nitrate	△	○	○		○	
	Sodium phosphate		△			○	
	Sodium sulfate	○	○	○	○	○	
Sulfuric acid	×	×	×	×	△		
Sulfurous acid	×	△			○		
T	Tannic acid	×	○			○	
W	Wine	○	○		○	○	
Z	Zinc chloride	×	△		△	○	

Notes: 1. Since fluid concentration (%) and conditions of use may affect the performance, detailed study is necessary when choosing materials.

Notes: 2. For the cells that have no symbol marks, please consult us for appropriate body material.