

Chemical resistance table

Resin Chemical	Concentration (%)	PTFE		PFA		FEP		ETFE		PVDF	
		Ordinary temperature	100°C	Ordinary temperature	100°C	Ordinary temperature	100°C	Ordinary temperature	100°C	Ordinary temperature	100°C
Acetone	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	×	—
Sulfurous acid gas	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Acetaldehyde	100	○	○	⊙	⊙	⊙	⊙	⊙	⊙	○	—
Ammonia water	28	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Ethanol	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—
Chlorine	—	○	○	⊙	○	⊙	○	⊙	×	⊙	×
Ammonium chloride	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Calcium chloride	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Hydrochloric acid	10	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	35	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○
Ozone	—	⊙	⊙	⊙	⊙	⊙	⊙	—	—	—	—
Sodium hydroxide	5	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○
	15	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	×
	30	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—	—
	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	×	×
Formic acid	20	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	○
	60	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	×
Xylene	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	○
Glycerin	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Chloroform	100	○	○	⊙	○	⊙	○	⊙	○	⊙	—
Chromic acid	20	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○
	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	×
Acetic acid	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	○
	75	⊙	⊙	⊙	○	⊙	⊙	⊙	○	⊙	×
Ethyl acetate	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—
Hypochlorous acid	10	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Oxalic acid	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	×
Bromine	—	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	×
Nitric acid	5	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	20	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	○
	60	⊙	⊙	⊙	○	⊙	○	⊙	○	⊙	—
Aluminum nitrate	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Ammonium nitrate	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Sodium nitrate	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Carbon tetrachloride	100	○	○	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—
Calcium hydroxide	30	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Ammonium carbonate	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Sodium carbonate	30	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Toluene	100	○	○	⊙	⊙	⊙	⊙	⊙	○	⊙	○
Trichloroethylene	100	⊙	⊙	⊙	○	⊙	○	⊙	○	⊙	○
Nitrobenzene	100	⊙	⊙	⊙	○	⊙	○	⊙	○	○	×
Carbon disulfide	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—
Lactic acid	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	×
Benzene	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	○
Methanol	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—
Methyl ethyl ketone	100	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	—
Sulfuric acid	10	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	90	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Ammonium sulfate	Saturation	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Phosphoric acid	50	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙
	80	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙

⊙...Excellent ○...Can be used depending on the condition ×...Not available—...No data

● Reference : Dictionary of Polymer technology

● Although the chemicals listed in the table are chemically inactive (it is clear that it does not cause any chemical reaction), it may cause a problem when it is subject to physical action such as permeation due to temperature, pressure, or chemical concentration.

● As the descriptions in the table are used only for "reference" and do not "guarantee" the product, please perform sufficient tests in the same environment and ensure that no problem is caused prior to the use.