

Chemical Resistance Data

※The following table should be referred to select a hose for a specific working fluid.

◎=Excellent, can be used without problems.

○=Good, may be affected to same extent, but can be used under general conditions.

△=Fair, need to verify suitability.

×=Poor, cannot be used.

	Product	Soft PVC	Polyolefin	Silicon Rubber	Fluoride Polymer (ETFE)	
		TOYORON SUPER TOYORON TOYOSIGNAL TOYOSPRING TOYORING	ECORON ECORON-S (Inner layer)	TOYOSILICONE TOYOSILICONE-S TOYOSILICONE-P	TOYOFUSSO TOYOFUSSO-E (Most Inner layer)	
	Chemical Name					
F	Fatty acid	○	△	△	◎	
	Ferric chloride	◎	◎	○	◎	
	Ferric nitrate	◎	◎	△		
	Ferric sulfate	○	◎	○		
	Flax seed oil	△	○	△	◎	
	Fluorboric acid	△	○		◎	
	Fluorine		×			
	Fluorobenzene		△	×		
	Formaldehyde 40 % 20°C	○	○		◎	
	Formic acid 25% RT	△	○	○	◎	
	Formic acid 50% RT	×	○	○	◎	
	Formic acid 90% RT	×	○	○	○	
	Fuel oil (heavy oil)			×		
	Furfural	×	×	◎	◎	
	Gasoline	×	△	×	◎	
	Gelatin		◎	◎		
	Glacial acetic acid				◎	
	G	Glauber's salt (Sodium sulfate)	○	◎	◎	
		Glucose		◎	◎	◎
		Glycerin	△	◎	◎	◎
Glycolic acid					◎	
Grease		×	△			
Helium gas		◎	◎			
Heptane			×		◎	
Hexaldehyde				◎		
Hexan		×	△	×	◎	
Hexyl alcohol				○		
H	High-test hypochlorite (Calcium hypochlorite)		◎	○	◎	
	Hydraulic oil	△				
	Hydrazine		△	△	◎	
	Hydrobromic acid [20% 70°C]	×	×			
	Hydrobromic acid [20% RT]	×	○		◎	
	Hydrobromic acid 37 % RT	×	○	×	◎	
	Hydrochloric acid 10% RT	○	◎	○	◎	
	Hydrochloric acid 20% (80°C)	×	×	×	×	
	Hydrochloric acid 20% RT	○	○	○	◎	
	Hydrochloric acid 38% RT	△	○	×	○	
	Hydrocyanic acid	○	◎			
	Hydrofluoric acid anhydrous		×	×		
	Hydrofluoride 10 % RT	○	△			
	Hydrofluoride 40 % RT	×	△	×		
	Hydrogen	◎	◎	○	◎	
	Hydrogen fluoride				◎	
	Hydrogen peroxide 30% RT	○	◎	◎	◎	
	Hydrogen peroxide 5% 50°C	○	◎	◎		
	Hydrogen peroxide 5% RT	○	◎	◎		
	Hydrogen sulfide	○	◎	△		
Hydroquinone	○	◎				
Hypochierous acid	○		×			