Chemical Resistance Data [Couplings]

⚠ Notes for use of Chemical Resistance Data (Hoses/Couplings/KAMLOK/Gasket)

(1) This table is based on documents concerning the resistance of the materials used in hoses and couplings to various chemicals, and does not guarantee TOYOX products.
(2) The data may differ according to the conditions such as usage methods, temperature, pressure, concentration and period, etc., so evaluate results as the user with the actual equipment and usage conditions.
(3) Chemicals which are dangerous when permeating (active gases, etc.) should not be used in gaseous form. Be sure to confirm the precautions for each product or to consult TOYOX. Regarding the use of fluids not indicated in the Chemical Resistance Data, consult our website at http://english.toyox-hose.com/ .
(4) This data may be amended or added to based on changing product specifications or new information; check the TOYOX website for the latest data.

◎ = Excellent, can be used without problems.
○ = Good, may be affected to some extent, but can be used under general conditions.
△ = Fair, need to verify suitability.
× = Poor, cannot be used.
— = No data

⚠ Caution The following tables are intended to serve only as your reference of materials, and are not intended to guarantee our products. Evaluate results as the user with the actual equipment and usage conditions.

As of November 2018

	Material / Chemical (Concentration density % / Temperature ℃)	Coupling fluid contact surface					
		Brass	SCS16A/SUS316L	SCS13/SUS304	Polyacetal resin	PPSU	NBR
M	Magnesium chloride	×	×	×	◎	◎	◎
	Magnesium hydroxide	△	△	△	◎	◎	○
	Magnesium sulfate	△	◎	◎	◎	—	◎
	Maleic acid	—	△	△	—	◎	—
	Malic acid	△	△	△	—	—	◎
	Mercuric chloride	×	×	×	◎	—	◎
	Methyl acetate	◎	◎	△	○	—	×
	Methyl alcohol (Methanol)	◎	○	△	△	◎	○
	Methyl ethyl ketone (MEK)	◎	○	○	×	×	×
	Methyl isobutyl ketone (MIBK)	△	△	△	△	△	×
	Methyl methacrylate	—	△	△	—	×	×
	Methylene dichloride	—	△	△	×	—	×
	Milk	—	○	○	◎	◎	◎
	Mineral oil	◎	◎	◎	○	—	◎
	Monochloroacetic acid	—	—	—	—	—	×
	Monochlorobenzene (Chlorobenzene)	—	—	—	×	—	×
	Monoethanolamine	—	△	—	—	—	×
N	Naphtha	△	△	△	◎	◎	△
	Naphthalene	△	△	△	◎	◎	×
	Naphthenic acid	—	△	△	—	—	○
	n-Dibutylamine	—	—	—	—	—	—
	Nickel acetate	—	△	△	◎	—	—
	Nickel chloride	×	○	×	◎	—	◎
	Nickel sulfate	—	△	△	◎	—	◎
	Nikawa (Collagen based glue)	△	△	—	◎	—	◎
	Nitric acid [10%]	×	◎	△	×	◎	×
	Nitric acid [10% 70℃]	×	◎	△	×	◎	×
	Nitric acid [30%]	×	◎	△	×	—	×
	Nitric acid [30% 70℃]	×	◎	△	×	—	×
	Nitric acid [61.3%]	×	◎	△	×	×	×
	Nitrobenzene	△	△	△	×	△	×
	Nitroethane	—	◎	◎	—	—	×
	Nitrogen	◎	◎	◎	◎	◎	◎
	Nitromethane	—	◎	◎	—	◎	×
	Nitropropane	—	◎	◎	—	—	×
	n-Methylaniline	—	—	—	—	—	—
	n-Methylpyrrolidone [40℃]	—	—	—	—	—	—
	No.1 (ASTM oil)	◎	◎	◎	◎	—	◎
	No.2 (ASTM oil)	◎	◎	◎	◎	—	○
	No.3 (ASTM oil)	◎	◎	◎	◎	—	△