CHEMICAL **RESISTANCE**

HOSE SELECTION BY FLUID - 100R1/2/13/16/17

Please refer to this chemical resistance table to select hose by fluid.
It is intended as a guide only and is not a guarantee. Final selection of the proper hose type, seal, or material of metal components is further dependent on many factors including pressure, fluid, and ambient temperature.

1. Resistance Rating Key

- = Excellent (Inner tube has little or no damage)
- = Good (Inner tube has some damage, but useful)
- = Not recommended
- = Unsatisfactory

2. Hose Types

1) NBR (type Ⅰ)	100R1, 100R2, 100R16, 100R6
2) NBR (type Ⅱ)	100R13
3) NR/SBR	COMPRESSOR HOSE
4) EPDM	HEATER HOSE, STEAM HOSE
5) TPC-ET	100R17 HYBRID
6) UHMW	NOT STOCKED
7) NYLON	PAINT SPRAY HOSE

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Chemical Name	Hose Polymer						
	NBR (type I)	NBR (type II)	NR / SBR	EPDM	TPC-ET	UHMW	NYLON
A							
Acetic Acid (10%)	🟡	🟡	🟡	🟡	🔵	🔵	🔵
Acetic Acid (100%)	🔴	🔴	🔴	🔴	🟡	🔵	🟡
Acetone	🔴	🟡	🟡	🔵	🔵	🔵	🔵
Acetylene	🔵	🔵	🟡	🔵	🔵	🔵	🔵
Air	🔵	🔵	🔵	🔵	🔵	🔵	🔵
Alcohol (Ethyl)	🔵	🔵	🔵	🔵	🔵	🔵	
Alcohol (Methyl)	🔵	🔵	🔵	🔵	🔵	🔵	
Ammonia Gas (cold)	🟡	🔵	🔵	🔵		🔵	
Ammonia Gas (hot)	🔴	🟡	🟡	🟡		🟡	
Ammonia Liquid	🟡	🔵	🔵	🔵		🔵	
Ammonium Chloride	🔵	🔵	🔵	🔵	🔵	🔵	
Aniline	🔴	🔴	🔴	🔵	🔴	🔵	🔴
Asphalt	🔴	🔴	🔴	🔴	🟡	🔴	🔵
ASTM Fuel A	🔵	🔵	🔴	🔴	🔵	🔵	🔵
ASTM Fuel B	🔴	🟡	🔴	🔴	🔵	🔵	🔵
ASTM Fuel C			🔴	🔴	🔵	🔵	🔵
ASTM Oil No.1	🔵	🔵	🔴	🔴	🔵	🔵	🔵
ASTM Oil No.2	🔵	🔵	🔴	🔴	🔵	🔵	🔵
ASTM Oil No.3	🔵	🔵	🔴	🔴	🔵	🔵	🔵
Automatic transmission fluid	🔵	🔵	🔴	🔴	🔵	🔵	🔵
B							
Beer	🔵	🔵	🔵	🔵	🔵	🔵	
Benzene	🔴	🔴	🔴	🔴	🔵	🔵	🔵
Butane	🔵	🔵	🔴	🔴	🔵	🔵	🔵
C							
Calcium Chloride	🔵	🔵	🔵	🔵	🔵	🔵	🔵
Carbon Dioxide	🔵	🔵	🔵	🔵	🔵	🔵	🔵
Carbon Monoxide	🔵	🔵	🟡	🔵	🔵	🔵	🔵
Carbon Tetrachloride	🔴	🔴	🔴	🔴	🔴	🔵	🔴

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Chemical Name	Hose Polymer						
	NBR (type I)	NBR (type II)	NR / SBR	EPDM	TPC-ET	UHMW	NYLON
C							
Chlorine Gas	🔴	🔴	🔴	🔴	🔴	🟡	
Chloroform	🔴	🔴	🔴	🔴	🔴	🔵	🔴
Coal Oil	🔵	🔵	🔴	🔴		🔵	🔵
Coal Tar	🔵	🔵	🔴	🔴	🔴	🔵	
Cresols	🔴	🔴	🔴	🔴	🔴	🔵	🔴
D							
Diesel fuel	🔵	🔵	🔴	🔴	🔵	🔵	🔵
E							
Ethers	🔴	🔴	🔴	🔴	🔴	🔵	🔵
Ethlene Glycol	🔵	🔵	🔵	🔵	🔵	🔵	🔵
F							
Formaldehyde	🟡	🟡		🔵	🟡	🔵	🔵
Formalin	🟡	🟡		🔵	🟡		🔵
Formic Acid	🟡	🟡	🟡	🔵	🟡	🔵	🔴
Freon 12	🔵	🔵	🟡	🟡	🔵	🔵	🔵
Freon 22	🔴	🔴	🟡	🔵	🟡	🔵	🔵
Freon 113	🔵	🔵	🔴	🔴	🔵	🔵	🔴
Fuel A (ASTM)	🔵	🔵	🔴	🔴	🔵	🔵	🔵
Fuel B (ASTM)	🔴	🔴	🔴	🔴	🔵	🔵	🔵
Fuel C (ASTM)				🔴		🔵	🔵
Fuel Oil	🔵	🔵	🔴	🔴	🔵	🔵	🔵
G							
Gas (Natural)	🔵	🔵	🔴	🔴	🔵	🟡	🔵
Glycerine	🔵	🔵	🔵	🔵	🔵	🔵	🔵
Grease	🔵	🔵	🔴	🔴	🔵	🔵	🔵
H							
Heptane	🔵	🔵	🔴	🔴	🔵	🔵	🔵
Hexane	🔵	🔵	🔴	🔴	🔵	🔵	🔵
Hydraulic Fluid (Petroleum base)	🔵	🔵	🔴	🔴	🔵	🔵	🔵

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Chemical Name	Hose Polymer						
	NBR (type I)	NBR (type II)	NR / SBR	EPDM	TPC-ET	UHMW	NYLON
H							
Hydraulic Fluid (Water glycol base)	●	●	●	●		●	
Hydraulic Fluid (Phosphate ester base)	●	●	●	●		●	
Hydrogen	●	●	●	●	●	●	●
I							
Isooctane	●	●	●	●	●	●	●
K							
Ketons	●	●	●	●	●	●	●
L							
Lacquer Solvents	●	●	●	●	●	●	●
Liquid Petroleum Gas	●	●	●	●		●	
M							
Mercury	●	●	●	●	●	●	●
Methyl Ethyl Ketone	●	●	●	●	●	●	●
N							
Naphtha	●	●	●	●	●	●	●
Nitric Acid (up to 25%)	●	●	●	●	●	●	●
Nitrobenzene	●	●	●	●	●	●	●
Nitrogen	●	●	●	●	●	●	
O							
Oleic Acid	●	●	●	●	●	●	●
Oxygen	●	●	●	●	●	●	●
Ozone	●	●	●	●	●	●	●
P							
Petroleum Oil	●	●	●	●	●	●	●
Phenol	●	●	●		●	●	●
Phospahte Esters	●	●	●	●	●		●
Propane	●	●	●	●		●	
S							
Sea Water	●	●	●	●	●	●	●
Soap Solutions	●	●	●	●	●	●	●

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Chemical Name	Hose Polymer						
	NBR (type I)	NBR (type II)	NR / SBR	EPDM	TPC-ET	UHMW	NYLON
S							
Sodium Carbonate	●	●	●	●	●	●	●
Sodium Chloride	●	●	●	●	●	●	●
Sodium Hydroxide	●	●	●	●	●	●	●
Steam	●	●	●	●	●		
Sulfur	●	●	●	●	●	●	
Sulfuric Acid	●	●	●	●	●	●	
T							
Toluene	●	●	●	●	●	●	●
Trichloroethylene	●	●	●	●	●	●	●
V							
Vinegar	●	●	●	●	●	●	●
W							
Water	●	●	●	●	●	●	●
X							
Xylene	●	●	●	●	●	●	●