



EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

# Chemical Resistance Ratings for Gates Hose Polymers, Couplings and Adapter Materials

The Chemical Resistance Table lists the relative resistance of hose and coupling materials to more common chemicals. These ratings do not cover all possible variations of all factors, such as temperature, concentration, degradation or fluid contamination, etc. Testing under actual conditions is the best way to ensure chemical compatibility for critical applications.

*For specific information, contact Gates Hose/ Connector Product Application, Denver, Colorado.*

<b>Rating Scale</b>
“1” Excellent resistance
“2” Good resistance
“X” Not recommended
“—” Testing recommended

## How to Use the Chemical Resistance Table

1. Chemicals are listed alphabetically.
2. Find the hose, coupling and adapter material type that has a resistance rating of “1” or “2” (See Rating Scale).
3. Find hose(s) with compatible polymer(s) in the Gates Hydraulic Hose Selection Guide.
4. Look for compatible couplings for the selected hose(s) by following the hose page references in the Selection Guide.

**NOTE:** O-rings used with couplings also must be considered for chemical compatibility with the fluid to be conveyed. This includes couplings containing internal O-rings; for example, MPX (Male Pipe Swivel). Gates standard O-ring is made of Nitrile. If O-rings other than Nitrile are required, contact Gates Hose/ Connector Product Application at 303-744-5070.



# Chemical Resistance Table

Rating Scale:	Gates Hose Polymers						Couplings & Adapters						
	Trade Names												
	A	C	C <sub>2</sub>	J	Z								
	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (Cover Rating Only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Chemical Name													
<b>A</b>													
Absorption Oil	2	1	2	1	2	-	1	1	-	-	-	1	1
Acetaldehyde	X	X	X	-	X	1	1	2	1	1	1	1	1
Acetamide	1	2	-	-	-	X	1	-	-	-	-	-	-
Acetic Acid, 5-20%	2	X	2	1	2	X	1	1	X	2	2	2	X
Acetic Acid, 25%	2	X	2	1	2	-	1	X	X	2	2	2	X
Acetic Acid, 30%	2	X	-	1	-	-	1	2	X	2	1	2	X
Acetic Acid, 50%	2	X	2	1	-	-	1	2	X	2	2	2	X
Acetic Acid, 50% Boiling	X	X	-	-	-	-	1	X	X	X	2	-	-
Acetic Acid, 80%	X	X	-	-	-	-	1	X	X	2	2	2	X
Acetic Acid, 80% Boiling	X	X	-	-	-	-	1	X	X	X	2	X	X
Acetic Acid, 100%	X	X	-	-	-	-	1	X	X	X	2	2	X
Acetic Acid, 100% Boiling	X	X	-	-	-	-	X	1	X	X	2	-	X
Acetic Acid, 100% (Hot) Vapors	2	2	-	-	-	-	-	X	X	X	2	2	X
Acetic Acid, Air Free	-	-	-	-	-	-	1	-	X	X	X	-	X
Acetic Acid, Anhydride	X	X	X	1	2	-	1	X	X	2	2	2	X
Acetic Acid, Areated	-	-	-	-	-	-	1	-	X	X	X	-	X
Acetic Acid, Crude	X	X	-	-	-	-	1	1	X	2	1	2	X
Acetic Acid, Glacial	X	X	X	1	X	X	1	X	X	2	2	2	-
Acetone (Dimethylketone)	X	X	X	1	X	X	1	1	1	1	1	1	1
Acetonitrile (Methyl Cyanide)	2	X	2	1	2	-	-	-	-	-	-	-	-
Acetylene	2	2	1	1	-	-	1	1	1	1	1	2	-
Acrylonitrile (Vinyl Cyanide)	X	X	X	1	X	-	-	-	1	1	1	2	1
Aero Lubriplate	1	1	-	-	-	-	-	-	1	1	1	1	1
Aero-Safe 2300	X	X	-	-	-	X	-	-	1	1	1	1	1
Aeroshell Type 1A, 1AC, 4	2	1	-	-	-	1	-	-	-	-	-	-	-
Aeroshell 7AGrease	2	1	-	-	-	X	-	-	1	1	1	1	-
Aeroshell 17 Grease	2	1	-	-	-	X	-	-	1	1	1	1	-
Aeroshell 750	X	2	-	-	-	X	-	-	1	1	1	1	-
Air, Ambient	1	1	1	1	1	1	1	1	1	1	1	1	1
Air, 150°F	1	1	1	1	1	1	1	1	1	1	1	1	1
Air, 180°F	2	2	2	1	2	2	1	1	1	1	1	1	1
Air, 200°F	X	X	X	1	X	2	1	2	1	1	1	1	1
Aircraft Hyd. Oil AA	-	1	-	-	-	-	-	-	1	1	1	1	1
Alcohol	1	1	-	-	-	-	1	1	1	1	1	1	1
Alcohol, Amyl	2	2	-	-	-	-	1	1	-	2	1	2	-
Alcohol, Benzyl	X	X	-	1	2	2	1	-	1	1	1	-	-
Alcohol, Butyl	2	X	2	-	2	1	1	1	1	1	1	1	1
Alcohol, Denatured	1	1	-	-	1	-	1	1	1	1	1	1	1
Alcohol, Diacetone	-	X	-	-	2	-	1	-	1	1	1	1	1
Alcohol, Ethyl (Ethanol)	1	1	1	1	1	2	1	1	1	1	1	2	-
Alcohol, Furfural	2	X	X	1	2	-	1	-	2	1	1	1	1
Alcohol, Hexyl (Hexanol)	2	1	-	-	X	-	1	-	1	1	1	1	2
Alcohol, Isobutyl	2	2	-	-	1	-	1	1	1	1	1	1	2
Alcohol, Isopropyl (Isopropanol)	2	2	2	-	2	2	1	1	1	1	1	2	-
Alcohol, Methyl (100%) (Methanol)	1	1	1	1	1	-	1	1	1	1	1	2	-
Alcohol, Methyl (6%)	1	1	1	1	-	-	1	1	1	1	1	2	-
Alcohol, Octyl	2	2	-	-	-	-	1	1	1	1	1	-	-
Alcohol, Propyl	1	1	-	-	-	-	1	X	2	1	1	1	1
Alkazine	X	X	X	-	X	X	-	-	1	1	-	-	-
Aluminum Chloride	1	1	1	1	1	2	1	X	X	2	2	X	X
Aluminum Fluoride	1	1	1	1	1	2	1	X	X	2	2	X	X
Aluminum Hydroxide	1	1	1	1	1	-	1	1	-	1	1	-	1
Aluminum Hydroxide, Saturated	1	1	-	-	-	-	1	1	-	1	-	-	1
Aluminum Nitrate	1	1	1	1	1	2	1	-	X	1	1	2	-
Aluminum Sulfate	1	1	1	1	1	X	1	1	X	X	2	X	X
Alums (Ammonium or Potassium)	1	1	1	1	1	-	1	-	X	2	2	X	X
Ammonia, Aqueous	1	2	1	-	1	-	1	1	-	1	1	-	X
Ammonium Carbonate	2	X	-	-	-	-	-	-	1	1	1	-	-
Ammonium Chloride, 1%	X	2	1	1	1	1	1	1	X	2	2	X	X

○ Cover stock rating only; Rating for tube stock "X" \*Use Gates fuel hose or contact Denver Product Applications Department.

Rating Scale:	Gates Hose Polymers						Couplings & Adapters						
	Trade Names												
	A	C	C <sub>2</sub>	J	Z								
	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (Cover Rating Only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Chemical Name													
Ammonium Chloride, 10% Boiling	X	X	-	-	-	-	1	X	X	2	2	X	X
Ammonium Chloride, 28% Boiling	X	X	-	-	-	-	1	X	X	2	2	X	X
Ammonium Chloride, 50% Boiling	X	X	-	-	-	-	1	X	X	2	2	X	X
Ammonium Hydroxide	2	2	2	1	1	X	1	1	2	1	1	-	X
Ammonium Hydroxide, 3 Molar	1	X	-	-	-	2	1	-	X	2	2	X	X
Ammonium Hydroxide, Concentrated	1	X	-	-	-	1	X	1	1	2	2	X	X
Ammonium Metaphosphate	2	2	2	-	1	-	1	-	1	1	1	X	-
Ammonium Nitrate, Fertilizer	1	2	1	1	1	1	1	X	1	1	1	2	X
Ammonium Nitrite	1	1	-	-	-	-	1	-	2	1	1	X	-
Ammonium Persulfate	X	X	X	1	-	X	-	X	X	2	2	X	X
Ammonium Persulfate, 5%	1	X	-	-	-	-	X	-	X	2	2	X	X
Ammonium Persulfate, 10%	1	X	-	-	-	X	-	X	X	2	2	X	X
Ammonium Phosphate (Mono, Di, Tri, Basic)	1	1	1	1	1	1	1	2	X	2	2	X	-
Ammonium Sulfate	1	2	1	1	1	1	1	X	X	X	2	X	X
Ammonium Thiocyanate	1	1	-	1	1	-	1	-	1	1	1	-	-
Amyl Acetate	X	X	X	2	X	2	1	1	X	1	1	X	2
Amyl Alcohol	2	2	2	1	-	-	1	-	1	1	1	1	1
Amyl Borate	2	2	2	-	-	-	-	-	-	-	-	-	-
Amyl Chloride	X	-	X	2	X	-	1	2	-	1	1	-	-
Amyl Chloronaphthalene	X	X	X	-	X	-	1	-	-	1	1	-	-
Amyl Naphthalene	X	X	X	-	X	-	1	-	-	1	1	-	-
Amyl Phenol	-	-	-	-	-	-	1	-	-	1	1	-	-
AN-0-3 Grade M	1	1	-	-	-	-	-	-	-	-	-	-	-
AN-0-6	1	1	-	-	-	-	-	-	-	-	-	-	-
AN-0-366	1	1	-	-	-	-	-	-	-	-	-	-	-
Anderol, L-774 (Diester)	X	2	-	-	-	-	1	X	-	-	-	-	-
Anderol, L-826 (Diester)	X	2	-	-	-	-	1	X	-	-	-	-	-
Anderol, L-829 (Diester)	X	2	-	-	-	-	1	X	-	-	-	-	-
ANG-25 (Glycerol Ester)	2	2	-	-	-	-	1	2	-	-	-	-	-
ANG-25 (Diester Base, TG749)	X	2	-	-	-	-	1	X	1	1	1	1	-
Aniline	X	X	X	2	X	X	1	2	2	1	1	X	X
Aniline Dyes	X	X	-	2	-	-	1	X	2	1	1	2	X
Aniline Hydrochloride	X	X	-	2	-	-	1	-	X	1	1	-	-
Animal Gelatin	1	1	-	1	-	-	1	-	-	1	1	-	-
Animal Fats	2	1	-	1	-	-	1	1	1	1	1	1	X
Animal Oil (Lard Oil)	2	1	-	1	-	-	1	-	1	1	1	1	-
Antifreeze, Alcohol Base	2	2	2	2	2	-	-	-	1	1	1	1	-
Antifreeze, Glycol Base	2	1	1	1	1	-	1	1	1	1	1	1	1
Antimony Chloride, 50%	-	1	-	-	-	-	1	X	X	X	X	-	-
AN-VV-0-366B Hydraulic Fluid	1	-	-	-	-	-	-	2	-	-	-	-	-
Aqua Regia (Concentrated)	X	X	X	2	X	X	1	X	X	X	X	X	-
Arco A.T.F. Dexron	-	1	-	-	-	-	-	-	-	-	-	-	-
Arco C2, 100	-	1	-	-	-	-	-	-	-	-	-	-	-
Aromatic Fuel 30%, Mil.	-	-	-	-	-	-	1	-	-	-	-	-	-
Aromatic Fuel 50%	X	2	-	-	-	-	1	-	-	-	-	-	-
Aromatic Hydrocarbons	X	X	-	-	X	2	1	-	2	1	2	2	2
Arsenic Acid	-	-	-	1	-	-	-	-	2	-	1	2	-
Askarel, Transformer Oil	X	X	X	-	X	-	1	-	-	1	1	1	-
Asphalt, Under 180°F	2	2	2	X	X	1	1	-	1	1	1	-	2
Asphalt, Cut Back	X	2	2	-	X	1	1	1	1	1	1	2	2
Asphalt, Topping	1	X	-	-	-	-	1	-	-	1	1	-	-
ASTM Oil No.	1	1	1	1	1	2	1	1	1	1	1	1	1
ASTM Oil No. 1	2	2	1	-	2	-	1	1	1	1	1	1	1
ASTM Oil No. 2	X	1	X	X	X	-	1	1	1	1	1	1	1
ASTM Oil No. 3	X	2	-	-	-	-	1	-	-	1	1	1	1
ASTM Oil No. 4	2	1	-	-	-	-	1	-	-	1	1	1	1
ASTM Reference Fuel A	2	1	1	1	1	-	1	1	1	1	1	1	1
ASTM Reference Fuel B	2	1	2	2	X	-	1	-	-	1	1	1	1
ASTM Reference Fuel C	X	2	X	2	X	-	1	-	-	1	1	1	-
ATL-857	X	2	-	-	-	-	-	-	-	-	-	-	-
Atlantic Dominion F	2	1	-	-	-	-	-	-	-	-	-	-	-

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS



Powering Progress.

gates.com/hydraulics



## Chemical Resistance Table

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers						Couplings & Adapters					
	Trade Names											
	A	C	C <sub>2</sub>	J	Z							
	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum
Chemical Name												
<b>B</b>												
Aurex 903R (Mobil)	2	1	-	-	-	-	-	-	-	-	-	-
Automatic Brake Fluid	2	X	-	-	-	-	1	-	1	1	1	1
Automatic Transmission Fluid - ATF	2	1	-	1	-	-	1	-	1	1	1	1
Aviation Gasoline, MIL	-	2	-	-	-	-	-	-	1	1	1	1
<b>C</b>												
Calcium Acetate	X	X	X	1	X	-	1	-	2	2	2	X
Calcium Arsenate	-	-	-	-	-	-	1	1	1	1	-	-
Calcium Bisulfate	1	1	2	1	1	-	1	-	-	2	2	X
Calcium Bisulfide	1	1	2	1	1	1	1	-	-	2	2	X
Calcium Bisulfite	1	1	1	1	1	-	1	1	X	1	1	1
Calcium Carbonate	1	1	1	1	1	1	1	1	2	1	1	X
Calcium Chlorate	1	1	1	-	1	-	1	-	2	2	1	-
Calcium Chloride	1	1	1	1	1	1	1	1	X	2	1	X
Calcium Hydroxide	1	2	2	1	1	X	1	-	X	X	1	2
Calcium Hydroxide, 10% Boiling	-	2	-	-	-	-	1	X	2	1	1	X
Calcium Hydroxide, 20% Boiling	-	-	-	-	-	-	1	X	-	1	1	X
Calcium Hydroxide, 50% Boiling	-	-	-	-	-	-	1	X	-	X	2	X
Calcium Hypochlorite, 5% (Under 100°F)	X	2	X	1	2	-	1	X	X	X	2	X
Calcium Hypochlorite, 15% (Under 100°F)	X	-	X	1	2	-	1	X	-	X	2	X
Calcium Nitrate	1	1	1	1	1	-	1	1	X	2	2	X
Calcium Silicate	-	2	-	1	2	-	1	-	1	1	1	1
Calcium Sulfate	1	1	1	1	1	-	1	-	2	1	1	2
Calcium Sulfide	1	2	-	1	-	-	1	2	2	1	1	2
Caliche Liquors	1	2	-	1	1	1	1	-	1	1	1	-
Cane Sugar Liquors	1	1	2	1	-	-	1	-	1	1	1	2
Carbolic Acid, Phenol	X	X	X	1	X	X	1	X	X	1	1	2
Carbon Dioxide, Dry	2	1	1	1	1	1	1	-	1	1	1	1
Carbon Dioxide, Wet	2	1	1	1	1	-	1	-	1	1	1	1
Carbon Disulfide	X	X	-	2	X	2	1	1	2	1	1	2
Carbon Monoxide, Under 150°F (Hot)	2	2	2	1	1	-	1	2	1	1	1	1
Carbon Tetrachloride, 5%-10%	-	-	-	-	-	-	1	-	-	X	-	-
Carbon Tetrachloride, Pure	X	X	X	2	X	X	1	X	X	X	2	2
Carbonic Acid	1	1	1	1	1	X	1	-	X	1	1	2
Castor Oil	2	2	2	1	2	2	1	1	1	1	1	1
Caustic Soda, 20%	2	X	X	1	1	X	1	2	2	1	1	X
Caustic Soda, 50%	2	X	X	1	1	X	1	2	2	1	1	X
Cellosolve Acetate, Under 100°F	X	X	X	2	X	-	1	-	2	2	2	-
Cellosolve, Butyl, Under 100°F	X	X	X	-	X	-	1	-	2	2	2	2
Cellosolve, Union Carbide, Under 100°F	X	X	-	-	-	-	1	-	2	2	2	-
Cellugard, Cellugard 200	1	1	-	-	-	-	1	-	1	1	1	1
Cellulube 90, 150, 220, 300, 550	X	X	X	-	X	-	1	-	1	1	1	1
Cellulube 1000, 220A, ST220, A60	X	X	X	-	X	-	1	-	1	1	1	1
Cellutherm 2505A	X	2	-	-	-	-	-	-	-	-	-	-
Chevron Fr-10, 13, 20.8	-	-	-	-	-	-	1	-	1	1	1	-
Chlordane	X	X	X	-	X	-	1	-	1	-	-	-
Chlorinate Paraffin & Petroleum Oil	-	-	-	-	-	-	1	-	1	1	1	1
Chlorine Gas, Dry	N/A	X	N/A	N/A	-	-	1	-	2	X	X	-
Chlorine Gas, Wet	N/A	X	N/A	N/A	-	-	1	-	X	X	X	X
Chlorine Trifluoride	X	X	-	-	-	-	-	-	1	1	1	-
Chlorine Water, 3% Chlorine	X	X	X	-	-	-	1	-	-	X	X	-
Chlorine Water, 25% Chlorine	X	X	X	-	2	2	1	2	-	X	X	-
Chloroacetic Acid (Under 100°F)	X	X	X	-	2	-	1	X	X	2	X	-
Chlorobenzene	X	X	X	X	X	-	1	X	X	2	2	X
Chlorobromo Methane	X	X	X	-	X	-	1	-	2	2	2	X
Chloroform	X	X	X	X	X	-	1	X	2	1	1	X
O-Chloronaphthalene	X	X	X	-	-	-	1	-	2	1	1	-
Chlorosulfonic Acid	2	X	X	X	-	-	1	X	1	-	-	-
Chlorotoluene	X	X	X	X	X	X	1	-	1	1	1	X
Chlorox, Bleach	2	2	-	1	2	-	1	-	X	X	2	X
Chromic Acid, 5%	X	X	-	-	-	-	1	X	X	X	2	X
Chromic Acid, 10%	X	X	X	1	2	X	1	X	X	X	2	X

○ Cover stock rating only; Rating for tube stock "X"

\*Use Gates fuel hose or contact Denver Product Applications Department.  
\*\*Nitrile 150°F or less, no constant contact.



# Chemical Resistance Table

Chemical Name	Rating Scale:						Gates Hose Polymers						Couplings & Adapters					
	1 Excellent						A	C	C	J	Z							
	2 Good resistance						Trade Names											
	X Not recommended						Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum
- Testing recommended																		
Chromic Acid, 25%	X	X	X	1	2	X	1	X	X	X	2	X	X	X	2	X	X	X
Chromic Acid, 50%	X	X	X	1	2	X	1	X	X	X	2	1	X	X	X	2	1	X
Chromic Acid, 100%	-	-	-	-	-	X	1	-	X	X	2	-	X	X	X	2	-	X
Circo Light Process Oil	1	1	1	-	-	-	1	-	1	1	1	1	-	1	1	1	1	-
Citgo FR Fluids	-	X	-	X	-	2	1	-	1	1	1	-	1	1	1	-	1	-
Citgo Glycol FR-20XD	-	1	-	-	-	2	1	-	1	1	1	-	1	1	1	-	1	-
Citgo Sentry (Under 100°F)	2	2	1	-	X	2	1	-	1	1	1	-	1	1	1	-	1	-
Citgo Tractor Hydraulic Fluid	-	1	-	-	-	2	1	-	1	1	1	-	1	1	1	-	1	-
Citric Acid, 5%	-	2	-	-	-	-	1	X	X	1	1	1	X	X	X	1	X	X
Citric Acid, 5% @150°F	-	2	-	-	-	-	1	X	X	X	1	2	X	X	X	1	2	X
Citric Acid, 15%	1	2	-	-	-	-	1	X	X	X	1	X	-	X	X	1	X	-
Citric Acid, 15% Boiling	1	2	-	-	-	-	1	X	X	2	1	X	X	2	1	X	X	X
Citric Acid, Concentrated Boiling	1	X	1	-	1	2	1	X	X	X	1	X	X	X	1	X	X	X
Coal Gas	1	X	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Coal Tars	X	2	X	2	2	-	1	X	1	1	1	1	1	1	1	1	1	1
Cod Liver Oil	1	1	1	-	-	-	1	-	1	1	1	1	1	1	1	1	1	1
Coke Oven Gas (Under 100°F)	X	2	X	-	2	-	1	-	1	1	1	1	1	1	1	1	1	1
Condor 1000,1002,1004, 1006,1008	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Condor 1008,1010,1012, 1014,1016	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Convelex 10	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper Arsenate, Cupric Arsenate	-	-	-	2	-	1	-	-	1	1	1	-	-	1	1	1	-	-
Copper Chloride, 1%	1	1	-	-	-	-	1	X	X	X	1	-	X	X	X	1	-	X
Copper Chloride, 5%	1	1	-	-	-	-	1	X	X	X	1	-	X	X	X	1	-	X
Copper Chloride, Cupric Chloride	2	2	2	2	2	1	2	X	X	X	1	-	X	X	1	-	X	X
Copper Cyanide, Cupric Cyanide	2	2	2	-	2	-	1	X	1	1	1	-	X	1	1	X	X	X
Copper Nitrate, 1% & 5%	1	1	-	-	-	-	1	X	1	1	X	X	X	1	1	X	X	X
Copper Nitrate, Cupric Nitrate	1	1	1	1	1	-	-	1	1	1	1	1	-	1	1	1	1	1
Copper Sulfate, Cupric Sulfate	1	1	1	1	1	1	1	1	X	1	1	X	X	X	1	X	X	X
Copper Sulfate, 10%	1	1	-	-	-	-	1	-	X	2	2	X	-	X	2	2	X	-
Copper Sulfate, 50%	1	1	-	-	-	-	1	-	X	2	2	X	-	X	2	2	X	-
Corn Oil	X	2	2	2	X	X	1	-	1	1	1	-	1	1	1	-	1	-
Corn Syrup	2	2	-	2	-	-	1	-	1	1	1	1	-	1	1	1	1	-
Cottonseed Oil	2	2	1	2	2	X	1	2	1	1	1	1	1	1	1	1	1	1
Creosote, Wood Or Coal Tar (Under 100°F)	X	2	X	-	X	X	1	X	2	1	1	1	X	2	1	1	1	X
Creosol, Cresylic Acid (Under 100°F)	X	X	X	1	X	-	1	X	2	1	1	2	-	2	1	1	2	-
Cresylic Acid	X	X	-	-	-	-	1	X	1	1	1	1	-	1	1	1	1	-
Crude Petroleum Oil (Under 100°F)	X	X	2	2	2	2	1	-	X	X	2	1	-	X	X	2	1	-
Cutting Oil, Water Soluble	X	1	-	-	-	-	1	-	1	1	1	-	1	1	1	-	1	-
Cutting Oil, Sulfur Base	X	1	-	-	-	-	1	-	1	1	1	-	1	1	1	-	1	-
Cutting Oil	2	1	2	1	X	-	1	-	1	1	1	1	1	1	1	1	1	1
Cyclohexane	X	2	-	1	X	1	1	1	1	1	1	1	1	1	1	1	1	1
Cyclohexanone	X	X	X	2	X	1	1	1	-	1	1	2	-	-	1	2	-	-
Cymene	X	X	X	X	X	-	1	-	1	1	1	1	1	1	1	1	1	1

\*\*Nitrile 150°F or less, no constant contact.

Chemical Name	Rating Scale:						Gates Hose Polymers						Couplings & Adapters						
	1 Excellent						A	C	C	J	Z								
	2 Good resistance						Trade Names												
	X Not recommended						Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
- Testing recommended																			
Dibutyl Phthalate (Under 120°F)	X	X	X	2	X	2	1	-	-	1	1	1	1	1	1	1	1	1	
Dibutyl Sebacate	X	X	X	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Dichlorobenzene	X	X	X	X	X	X	1	1	-	1	1	-	1	1	-	1	1	-	
Dichloroethane	X	X	X	X	-	-	1	X	-	X	X	X	X	X	X	X	X	X	
Diesel, Biodiesel**	-	-	-	-	-	-	1	1	-	1	1	-	-	-	1	1	-	-	
Diesel Oil, Fuel ASTM #2	⊗	1	⊗	2	X	1	1	1	1	1	1	1	1	1	1	1	1	1	
Diester Lubricant MIL-I-7808	X	2	-	-	-	-	1	-	-	1	1	1	1	-	1	1	1	-	
Diester Synthetic Lubricants	X	2	-	-	-	-	1	-	-	1	1	1	1	-	1	1	1	-	
Diethylamine (Under 120°F)	2	2	-	2	X	-	1	1	1	1	1	1	1	1	1	1	1	1	
Diethylene Glycol	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Diethyl Ether	X	X	-	1	-	-	1	-	-	1	1	1	1	-	1	1	1	1	
Diethyl Phthalate	-	X	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Diethyl Sebacate	X	X	X	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Diisobutylene	X	2	-	1	X	-	1	-	-	2	1	1	2	1	1	1	2	1	
Diisobutyl Ketone	X	X	X	2	X	-	1	1	1	1	1	1	1	1	1	1	1	1	
Diisopropyl Ketone	X	X	X	2	X	-	1	1	-	-	1	1	-	-	1	1	-	-	
Dimethyl Aniline	X	X	X	2	X	-	1	-	-	-	-	-	-	-	-	-	-	-	
Dimethyl Formamide (Under 120°F)	X	X	X	-	-	-	1	-	-	1	1	1	1	-	1	1	1	-	
Dimethyl Phthalate	X	X	X	1	X	-	1	-	-	-	-	-	-	-	-	-	-	-	
Dioctyl Phthalate	X	X	X	2	X	-	1	-	-	1	1	1	1	1	1	1	1	1	
Dioctyl Sebacate	X	X	X	X	X	-	1	-	-	1	1	1	1	-	1	1	1	-	
Dioxane	X	X	X	2	-	-	1	-	1	1	1	1	1	1	1	1	1	1	
Dipentene	X	X	-	2	-	-	1	-	-	1	1	1	1	1	1	1	1	1	
Dircro Oils	-	1	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
Dispersing Oil #10	X	X	-	-	-	-	1	1	1	1	1	1	1	-	1	1	1	-	
Dowtherm A	X	X	X	2	X	X	1	-	-	1	1	1	1	1	1	1	1	1	
Dowtherm E	X	X	-	2	-	-	1	-	-	1	1	1	1	1	1	1	1	1	
DP47, 200 Flow - DOW	-	1	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
Duro FR-HD	-	1	-	-	-	X	1	1	1	1	1	1	1	1	1	1	1	1	
Duro Oils	-	1	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
<b>E</b>																			
Elco 28-EPLubricant	X	1	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	
Enamels	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	
Energol HL68	-	1	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	
Energol HLPC 68	-	1	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	
EPHydraulic Oils, Chevron	-	1	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	
Epichlorohydrin (Under 120°F)	X	X	-	-	-	-	1	-	-	-	1	2	1	1	-	-	-	-	
Esam-6 Fluid	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethanol	1	1	-	1	-	X	1	1	X	1	1	1	1	X	1	1	1	1	
Ethanolamine, Aminoethanol	2	2	-	1	X	X	1	1	-	-	1	1	1	1	1	1	1	1	
Ethers (Under 120°F)	X	2	X	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
Ethyl Acetate	X	X	X	2	X	2	1	1	1	1	1	1	1	1	1	1	2	2	
Ethyl Acetoacetate	X	X	X	1	X	X	1	-	1	1	1	1	1	1	1	1	1	1	
Ethyl Acrylate	X	X	X	2	X	X	1	-	-	1	1	1	1	-	1	1	1	-	
Ethyl Alcohol	1	1	1	1	-	-	1	1	1	1	1	1	1	1	1	1	2	2	
Ethyl Amine, Monoethylamine	X	X	X	1	X	X	1	-	2	1	1	2	1	2	1	2	1	2	
Ethyl Benzene	X	X	X	2	X	1	1	-	-	1	1	1	1	-	1	1	1	1	
Ethyl Bromide, Di	X	X	X	2	X	-	1	-	1	1	1	1	1	1	1	1	1	1	
Ethyl Butyrate	X	X	X	-	-	-	1	-	-	-	1	1	1	-	1	1	1	-	
Ethyl Cellulose	-	-	-	1	-	-	1	-	-	-	1	1	1	-	1	1	1	-	
Ethyl Chloride	X	X	X	-	X	1	-	-	-	-	2	1	1	1	2	1	2	1	
Ethyl Ether	X	X	X	-	-	-	1	-	-	-	2	1	1	1	1	1	1	1	
Ethyl Mercaptan	X	X	X	-	X	X	1	-	-	-	2	-	-	-	-	-	-	-	
Ethyl Oxalate	X	X	-	1	X	X	1	-	-	-	-	-	-	-	-	-	-	-	
Ethyl Pentachlorobenzene	-	X	-	X	-	1	1	-	-	-	2	1	1	-	-	-	-	-	
Ethyl Silicate	1	1	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
Ethylene Chloride	X	X	X	X	-	-	1	1	X	2	1	1	1	2	1	1	-	2	
Ethylene Chlorohydrin, Under 100°F	X	X	X	-	-	X	1	X	1	1	2								



### Chemical Resistance Table

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers							Couplings & Adapters					
	Trade Names							Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	
	A	C	C <sub>2</sub>	J	Z								
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon					
<b>F</b>													
Factovis 52	-	1	-	-	-	-	-	1	1	1	1	1	1
Fatty Acids	2	2	2	2	X	1	1	1	2	1	1	1	2
Ferric Chloride	-	-	-	1	2	-	-	1	X	X	X	X	X
Ferric Chloride, 1%	1	1	-	-	-	-	1	1	X	2	2	X	X
Ferric Chloride, 1% Boiling	-	2	-	-	-	-	1	1	X	X	X	X	X
Ferric Chloride, 5% Still	2	1	-	-	-	-	1	1	X	X	X	X	X
Ferric Chloride, 5% Agitated or Aerated	2	2	-	-	-	-	1	1	X	X	X	X	X
Ferric Chloride, 10%	2	1	-	-	-	-	1	1	X	X	X	X	X
Ferric Sulfate	2	2	2	1	2	-	-	1	X	1	1	X	X
Ferrous Chloride	1	1	-	1	2	-	-	-	X	1	2	-	2
Ferrous Nitrate	2	2	2	-	2	-	1	-	-	1	1	-	-
Ferrous Sulfate, Copper Gas	2	2	2	1	2	-	-	1	X	1	1	1	2
Ferrous Sulfate, 10%	1	1	-	-	-	-	1	1	X	2	2	X	-
Ferrous Sulfate, Saturated	1	-	-	-	-	-	1	1	-	2	2	X	-
Fire Resistant Hydraulic Fluid, Texaco	-	1	-	-	-	-	1	-	1	1	1	1	1
Firtec 290, MF	-	-	-	-	-	-	1	-	-	-	-	-	-
Fixing Solution, Photo	2	-	-	-	2	-	1	-	-	1	1	-	-
Fluoboric Acid	1	1	-	1	-	-	1	-	1	-	1	X	-
Fluoboric Acid, 65%	2	-	-	1	2	X	1	-	-	1	1	-	-
Fluosilicic Acid	2	1	-	-	-	-	1	-	X	X	X	X	1
Fluosilicic Acid, 50%	2	X	X	1	2	X	1	X	-	-	-	1	-
Formaldehyde	1	X	-	1	-	-	1	2	1	1	1	1	X
Formaldehyde, 37%	2	2	-	1	2	2	-	-	-	1	1	1	X
Formaldehyde, Hot	-	-	-	-	-	-	1	1	X	2	1	2	1
Formic Acid (Under 120°F)	1	X	1	1	2	2	X	1	2	X	2	1	2
Formic Acid, Dilute Hot	1	X	-	1	-	-	1	X	X	2	1	2	X
Freon 12 (Under 100°F)	Use Freon Hose Only							2	1	1	1	1	1
Freon 114	Use Freon Hose Only							1	1	1	1	1	1
Fruit Juices	-	-	-	-	-	-	1	1	X	1	1	-	-
Fuel Oil	②	1	①	1	X	2	1	1	2	2	2	1	2
Fumaric Acid	2	X	-	-	-	X	1	-	-	1	1	1	-
Furan, Furfuran	X	X	X	1	-	-	1	-	1	1	1	1	1
Furan Resin	X	X	-	-	-	-	1	-	-	1	1	-	-
Furfural Alcohol, Ant Oil	2	X	X	1	2	-	1	1	2	1	1	1	1
Fusel Oil, Grain Oil	X	X	-	-	-	-	1	-	-	-	-	-	-
Fyrquard 150, 200	-	1	-	-	-	-	1	-	1	1	1	1	1
Fyrquard A60, 90, 100, 150, 220, 300, 500	X	X	-	-	-	-	1	-	1	-	-	1	-
Fyrquard 1000, 15R&O, 220R&O, 550R&O	X	X	-	-	-	-	1	-	1	-	-	1	-
<b>G</b>													
Gallic Acid (Under 100°F)	X	X	X	1	-	X	1	2	X	1	1	X	-
Gas, Natural	-	-	-	X	-	-	1	-	1	1	1	-	2
Gasohol	2	*	*	-	X	-	1	-	2	1	1	1	1
Gasoline, Aviation	X	-	2	-	-	-	1	-	-	1	1	1	1
Gasoline, Meter	X	*	-	-	-	-	1	X	1	1	1	1	X
Gasoline, Premium	②	*	*	-	X	X	1	-	2	1	1	1	1
Gasoline, Sour	X	X	-	-	-	-	1	-	2	1	1	X	-
Gasoline, Standard	①	*	*	2	X	X	1	-	2	1	1	1	1
Gasoline, Unleaded Under 50°F Aromatics	X	*	X	-	X	X	1	-	2	1	1	1	1
Gelatin	1	1	-	-	-	-	1	1	X	1	1	1	-
Glauber's Salt	2	X	-	-	-	-	1	-	1	1	1	-	-
Glucose	1	1	1	-	1	1	1	1	1	1	1	1	1
Glue (Under 120°F)	2	2	2	-	1	1	1	2	2	1	1	2	X
Glycerine, Glycerol	1	1	1	1	1	1	1	1	2	1	1	1	2
Glycol FR Fluids	-	1	-	-	-	-	1	-	1	1	1	1	1
Glycols (Under 120°F)	1	1	1	1	1	1	1	1	2	1	1	1	1
Grease, Ester Base	-	-	-	-	-	-	1	1	1	1	1	1	1

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers							Couplings & Adapters					
	Trade Names							Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	
	A	C	C <sub>2</sub>	J	Z								
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon					
Grease, Petroleum Base	2	1	2	-	2	1	1	1	1	1	1	1	1
Grease, Silicone Base	-	-	-	-	-	-	1	1	1	1	1	1	1
Green Sulfate Liquor, Under 100°F	2	2	1	2	1	-	1	-	1	1	1	-	-
Gulf FR Fluid G-200	-	1	-	-	-	X	1	-	1	1	1	1	1
Gulf FR Fluid P37, P40, P43, P45, P47	-	X	-	-	-	X	1	-	-	-	-	-	-
<b>H</b>													
Halowax Oil	X	X	X	-	X	-	1	-	-	-	-	-	-
Heptachlor, In Petroleum	-	2	X	-	-	-	1	-	-	-	-	-	-
Heptane (Under 100°F)	②	1	②	1	X	1	1	1	1	1	1	1	1
N-Hexaldehyde	2	X	2	-	-	-	1	-	1	1	1	1	1
Hexane (Under 120°F)	②	1	②	2	1	1	1	1	1	1	1	1	1
Hexene	②	2	-	1	-	-	1	-	1	1	1	-	1
Hexyl Alcohol	1	2	1	1	-	-	1	-	1	1	1	1	2
High Viscosity Lubricant, U4	2	1	-	-	-	-	1	-	-	-	-	-	-
High Viscosity Lubricant, H2	2	1	-	-	-	-	1	-	-	-	-	-	-
Hilo MS #1	X	X	-	-	-	-	-	-	-	-	-	-	-
Houghto-Safe 1010,1055 (Phos. Ester)	X	X	X	1	X	-	1	-	1	1	1	1	1
Houghto-Safe 1115,1120, 1130 (Phos. Ester)	X	X	X	1	X	-	1	-	1	1	1	1	1
Houghto-Safe 271,416,520, 616 (Water/Glycol)	2	1	1	-	-	2	1	-	1	1	1	1	1
Houghto-Safe 620, 625, 640, 525 (Water/Glycol)	1	1	1	-	-	2	1	-	1	1	1	1	1
Houghto-Safe 5046, 5046W (Water/Oil Emulsion)	2	1	-	-	-	-	1	-	1	1	1	1	1
Hy-Chock Oil	-	1	-	-	-	-	1	1	1	1	1	1	1
Hydrafluid 760, Texaco and Houghton	-	1	-	-	-	-	1	1	1	1	1	-	1
Hydrafluid AZR&O, A, B, AA, C	-	1	-	-	-	-	1	1	1	1	1	-	1
Hydrasol A	-	1	-	-	-	-	1	1	1	1	1	-	-
Hydraulic Fluid, Phosphate Ester Base	X	X	X	1	-	X	1	1	1	1	1	-	-
Hydraulic Fluid, Std. Petroleum Oils	2	1	2	1	2	2	1	1	1	1	1	1	1
Hydraulic Fluid, Water Glycol Base	1	1	1	-	-	1	1	1	1	1	1	1	1
Hydraulic Fluid HF - 18, HF - 20	-	1	-	-	-	2	1	1	1	1	1	1	1
Hydraulic Fluid HF - 31	-	-	-	-	-	-	1	1	1	1	1	1	1
Hydraulic Oils, Petroleum	2	1	-	-	-	-	1	1	1	1	1	1	1
Hydraulic Oils, Synthetic	-	X	-	-	-	-	1	-	1	1	1	1	1
Hydraulic Safety Fluid 200 & 300, Texaco	-	1	-	-	-	-	1	1	-	1	1	1	1
Hydrazine	X	X	X	-	-	2	1	-	-	-	-	-	-
Hydro-Drive Oil, Houghton	-	1	-	-	-	2	1	-	-	-	-	-	-
Hydrobromic Acid	X	X	-	-	-	-	1	X	1	1	1	X	-
Hydrobromic Acid, 37%	X	X	X	1	2	X	1	X	1	1	1	X	-
Hydrochloric Acid	2	X	-	-	-	-	1	X	X	X	X	X	X
Hydrochloric Acid, 3 Molar	2	X	-	-	-	-	1	X	X	X	X	X	X
Hydrochloric Acid, Concentrated	X	X	-	-	-	-	1	X	X	X	X	X	X
Hydrochloric Acid, 15%	X	X	X	1	2	X	1	X	X	X	X	X	X
Hydrochloric Acid, 37%	X	-	X	1	2	X	1	X	X	X	X	X	X
Hydrocyanic Acid, 20% Under 100°F	X	X	X	-	2	X	1	1	X	1	1	1	X
Hydrocyanic Acid, 98%	-	-	-	-	-	-	1	-	-	-	-	-	-
Hydrofluoric Acid, 10%	2	2	X	1	1	X	1	X	X	X	X	X	X
Hydrofluoric Acid, 20% (Under 120°F)	2	X	X	1	2	X	1	X	X	X	X	X	X
Hydrofluoric Acid, 48% (Under 120°F)	2	X	X	1	2	X	1	X	X	X	X	X	X
Hydrofluoric Acid, 70%	-	X	X	-	2	X	1	X	X	X	X	X	X
Hydrofluoric Acid, Concentrated	X	X	X	1	2	X	1	X	X	X	X	X	X
Hydrofluoric Acid, Anhydrous	-	X	-	-	-	-	1	-	-	-	-	-	-
Hydrofluosilicic	X	X	X	X	-	-	1	X	X	X	X	X	1
Hydrogen	1	1	-	1	-	-	1	-	X	X	X	1	-

○ Cover stock rating only; Rating for tube stock "X"  
 \*Use Gates fuel hose or contact Denver Product Applications Department.



# Chemical Resistance Table

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers					Couplings & Adapters							
	A C C <sub>2</sub> J Z												
	Trade Names												
	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Chemical Name													
Hydrogen Chloride Gas	-	-	-	1	-	-	1	-	-	1	1	-	-
Hydrogen Cyanide Gas	-	-	-	-	-	-	-	-	-	-	1	-	-
Hydrogen Fluoride (Under 100°F)	-	X	-	-	-	-	1	-	2	2	1	-	-
Hydrogen Peroxide, Dilute	1	2	-	-	-	-	1	1	1	-	1	-	X
Hydrogen Peroxide, 10%	X	1	X	1	2	X	1	X	X	2	1	1	X
Hydrogen Peroxide, 30%	X	2	X	1	2	X	1	X	X	2	1	1	X
Hydrogen Peroxide, 70%	X	X	X	1	-	X	1	X	X	2	1	1	X
Hydrogen Peroxide, 90%	X	X	-	-	-	-	1	-	X	2	1	-	X
Hydrogen Sulfide	2	X	-	-	-	-	1	1	2	2	1	-	X
Hydrogen Sulfide Aqueous Solution	2	X	-	-	-	-	1	X	-	-	X	-	-
Hydrogen Sulfide, Gas	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrolube, Water Glycol	2	1	-	-	-	X	1	-	1	1	1	-	1
Hydrolubric Oil, Houghton	-	2	-	-	-	2	1	1	-	-	-	-	-
Hydroquinone	X	-	-	-	X	-	1	-	-	1	1	2	-
Hykil No.6 (33%); Water (67%)	-	2	-	-	-	-	1	-	-	-	-	-	-
Hypochlorous Acid (Under 120°F)	X	X	X	-	2	-	1	1	2	2	2	X	-
Hypoid Grease (Parapoid 10-C)	-	1	-	-	-	-	1	-	-	-	-	-	-
<b>I</b>													
Imol, Imol S150, S220, S300, S500	-	1	-	-	-	2	1	1	1	1	1	1	-
Industron 53	-	1	-	-	-	-	1	-	-	-	-	-	-
Ink (Printers)	1	1	-	-	-	-	1	1	2	2	1	-	2
Ink Oil	-	2	-	-	-	-	1	-	1	1	1	-	1
Insulating Oil (Transformer)	2	1	2	-	X	-	1	-	1	1	1	-	1
Isobutyl Alcohol	2	2	2	1	-	-	1	1	1	1	1	2	-
Iodine (Under 100°F)	X	X	-	1	2	X	1	1	2	2	2	X	-
Iodine, In Alcohol	2	-	-	-	-	X	1	-	-	-	-	X	-
Iodine Pentafluoride	X	X	-	-	-	-	1	-	X	2	2	X	-
Isooctane	1	1	2	2	1	2	1	1	1	1	1	2	1
Isocetyl Thioglucolate	-	-	-	-	-	-	1	1	-	-	-	-	-
Isobutane - WET	X	X	-	-	-	X	1	X	X	1	1	2	1
Isopropyl Acetate	X	X	X	-	X	2	1	1	2	2	1	X	1
Isopropyl Alcohol (Isopropanol)	2	2	2	1	2	2	1	1	1	1	1	1	2
Isopropyl Ether	X	X	X	-	-	-	1	1	1	1	1	1	1
<b>J</b>													
Fuel JP-3 (Under 100°F)	ⓞ	1	ⓞ	-	X	2	1	1	1	1	1	2	1
Jet Fuel JP-4 (Under 100°F)	ⓞ	1	ⓞ	-	X	-	1	1	1	1	1	2	1
Jet Fuel JP-5	X	1	X	-	X	-	1	1	2	1	1	2	1
Jet Fuel JP-6	X	1	X	-	X	-	1	1	2	1	1	2	1
Jet Fuel JP-x	2	1	X	-	X	-	1	1	2	1	1	2	1
<b>K</b>													
Kerosene	X	1	ⓞ	1	X	-	1	1	1	1	1	1	1
Ketchup	1	1	-	-	-	-	1	1	-	1	-	-	-
Ketones	X	X	X	-	X	X	1	1	1	1	2	1	-
<b>L</b>													
Lacquer Solvents	X	X	X	-	X	2	1	1	X	2	1	1	1
Lacquers	X	X	X	-	X	-	1	1	X	X	1	1	1
Lactic Acid	1	X	X	-	1	X	1	-	X	2	1	X	2
Lactic Acid (5%)	2	1	-	-	-	-	1	1	X	2	1	1	X
Lactic Acid (5% Boiling)	X	X	-	-	-	-	1	-	X	2	1	2	X
Lactic Acid (10% Boiling)	X	X	-	-	-	-	1	-	X	2	1	X	X
Lactol	2	2	2	-	-	-	1	-	1	1	1	1	1
Lard	2	1	-	1	-	-	1	1	1	1	1	X	-
Lasso (Ag Spray)	-	-	-	-	-	-	1	1	-	1	-	-	-
Latex	1	1	-	-	X	-	1	1	1	1	1	1	1
Lead Acetate	X	X	-	1	2	1	1	-	2	2	2	X	1
Lead Arsenate	2	2	-	-	-	-	1	-	1	1	1	-	-
Lead Nitrate	2	2	-	-	1	1	1	-	1	2	2	-	-
Lead Sulfate	1	1	-	1	2	-	1	-	1	1	1	-	-

ⓞ Cover stock rating only; Rating for tube stock "X"

\*Use Gates fuel hose or contact Denver Product Applications Department.

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers					Couplings & Adapters							
	A C C <sub>2</sub> J Z												
	Trade Names												
	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Chemical Name													
Lead, Tetraethyl (Under 100°F)	X	2	X	-	X	-	1	2	-	-	-	-	-
Lead, Tetramethyl	X	2	X	-	X	1	1	-	-	-	-	-	-
Lecithin	2	X	-	-	-	-	1	-	-	1	1	-	-
Ligroin (Petroleum Ether, Under 120°F)	X	1	-	-	X	-	1	-	2	1	1	X	-
Lime (Chlorinated, Free Chlorine 20%)	-	1	-	1	-	1	-	-	-	2	-	-	-
Lime Bleach (Under 100°F)	X	2	X	-	X	-	-	-	X	2	1	-	-
Lime Sulphur	1	X	-	-	-	-	2	1	2	1	1	X	X
Lime Sulfur (Under 135°F)	1	X	X	-	2	-	2	1	2	1	1	X	X
Lindane (Ag Spray)	-	-	-	-	-	-	1	1	1	-	1	-	-
Linoleic Acid	X	2	X	-	-	-	1	-	X	2	1	1	-
Linseed Oil	X	1	-	-	-	-	1	1	1	1	1	2	2
Linseed Oil (Boiled)	2	2	1	1	1	1	1	-	2	1	1	1	2
Lubricating Oil (SAE 10, 20, 30, 40, 50)	2	2	-	-	-	-	1	1	1	1	1	1	1
Lubricating Oils (Diester, Under 135°F)	X	2	X	-	-	X	1	1	1	1	1	1	1
<b>M</b>													
Machine Oil (Under 135°F)	1	1	2	-	2	-	1	1	1	1	1	1	1
Magnesium Carbonate	1	1	1	-	1	1	1	-	2	2	2	1	-
Magnesium Chloride	1	1	1	1	1	1	1	1	X	2	1	X	2
Magnesium Hydroxide	2	2	2	1	1	X	1	-	1	1	1	X	X
Magnesium Nitrate	2	2	2	-	1	-	1	-	2	2	2	X	1
Magnesium Sulfate	2	2	2	1	1	1	1	1	2	2	2	2	2
Malathion (Ag Spray Dilute)	-	2	-	-	-	-	1	1	1	1	1	-	1
Maleic Acid	2	X	-	-	-	-	1	-	2	2	1	-	-
Malic Acid	-	-	-	-	-	-	1	-	2	2	1	-	-
Manganese Salts	-	1	1	-	1	-	1	-	-	-	-	-	-
Maxmul (Penzoil Hydraulic Fluid)	2	1	2	-	-	-	1	-	1	-	1	-	-
Mercuric Chloride	1	2	2	1	1	2	1	X	X	1	1	X	X
Mercuric Cyanide	1	2	2	-	1	-	-	-	2	2	2	X	-
Mercuric Nitrate (Under 120°F)	1	2	2	-	1	-	1	-	1	1	1	X	-
Mercury	1	2	2	1	1	2	1	1	1	1	1	X	X
Mesityl Oxide	X	X	X	2	X	X	1	-	1	1	1	1	1
Methane	2	1	-	-	-	-	1	-	-	1	-	1	-
Methoxychlor (Insecticide)	-	-	-	-	-	-	1	X	1	1	1	-	-
Methyl Acetate	X	X	X	1	X	-	1	-	1	1	1	1	1
Methyl Acrylate	X	X	X	-	X	-	1	-	1	1	1	1	1
Methyl Alcohol	1	1	1	1	-	-	1	1	1	1	1	1	2
Methyl Amine (25% Aqueous Solution)	2	X	-	-	-	-	1	-	1	1	1	1	-
Methyl Amine (60%)	2	2	-	-	-	-	1	2	1	1	1	1	2
Methyl Amine (99%)	X	X	-	-	-	-	1	-	1	1	1	1	X
Methyl Bromide	X	X	X	-	X	X	1	1	1	1	1	X	1
Methyl Butyl Ketone (MBK)	X	X	X	2	X	-	1	-	1	1	1	1	1
Methyl Cellosolve (Under 100°F)	2	X	-	1	X	-	1	-	2	2	2	2	1
Methyl Chloride	X	X	X	X	X	-	1	1	1	1	1	-	1
Methyl Ethyl Ketone (MEK)	X	X	X	2	X	X	1	1	1	1	1	2	1
Methyl Formate	2	X	X	-	X	-	1	-	2	1	1	1	1
Methyl Isobutyl Ketone (MIBK, 100°F)	X	X	X	2	X	X	1	1	1	1	1	1	1
Methyl Isopropyl Ketone	X	X	X	2	X	X	1	1	1	1	1	1	1
Methyl Methacrylate	X	X	X	2	2	-	1	-	2	2	2	-	-
Methyl Salicylate	2	2	2	-	-	-	1	-	1	1	1	1	1
Methyl Sulfate (Dimethyl, Under 100°F)	X	X	X	-	X	1	1	1	1	1	1	-	-
Methylene Chloride	X	X	X	X	X	-	1	X	1	1	1	X	1
Methylene Dichloride	X	X	X	-	-	-	1	1	1	1	1	X	1
Mineral Oil (Under 120°F)	1	1	1	1	1	1	1	1	1	1	1	2	1
Mineral Spirits	-	1	2	-	X	-	1	-	1	1	1	2	1



EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS



Chemical Resistance Table

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

Table with columns: Rating Scale (1 Excellent, 2 Good resistance, X Not recommended, - Testing recommended), Gates Hose Polymers (Trade Names: Neoprene, Nitrile, Nitrile/PVC, CPE, Hypalon, Urethane, PTFE, Nylon), Couplings & Adapters (Carbon Steel, Stainless Steel 304, Stainless Steel 316, Aluminum, Brass), and Chemical Name.

Table with columns: Rating Scale (1 Excellent, 2 Good resistance, X Not recommended, - Testing recommended), Gates Hose Polymers (Trade Names: Neoprene, Nitrile, Nitrile/PVC, CPE, Hypalon, Urethane, PTFE, Nylon), Couplings & Adapters (Carbon Steel, Stainless Steel 304, Stainless Steel 316, Aluminum, Brass), and Chemical Name.

○Cover stock rating only; Rating for tube stock "X" \*Use Gates fuel hose or contact Denver Product Applications Department.



# Chemical Resistance Table

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers						Couplings & Adapters						
	Trade Names						Carbon Steel Stainless Steel 304 Stainless Steel 316	Aluminum	Brass				
	A	C	C <sub>2</sub>	J	Z								
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon					
Potassium Chlorate	1	1	-	-	-	2	1	1	2	2	2	2	-
Potassium Chloride (1% To 5%)	1	1	-	1	-	2	1	1	1	2	2	X	X
Potassium Chloride (Boiling)	-	-	-	-	-	1	-	-	-	2	2	-	X
Potassium Cyanide	1	1	-	1	-	-	1	1	2	1	1	X	X
Potassium Dichromate	1	1	-	1	-	-	1	2	1	2	2	2	-
Potassium Ferrocyanide	-	-	-	-	-	-	1	-	2	1	1	2	-
Potassium Fluoride	-	-	-	-	-	-	1	-	-	-	-	-	-
Potassium Hydroxide	2	2	-	-	-	-	-	1	1	1	1	-	-
Potassium Hydroxide (5%)	1	1	-	-	-	-	1	1	2	2	2	X	X
Potassium Hydroxide (27% Boiling)	-	-	-	-	-	-	1	-	2	2	1	X	X
Potassium Hydroxide (30%, Caustic Potash)	-	-	-	1	-	-	1	-	-	-	-	-	-
Potassium Hydroxide (50% Boiling)	-	-	-	-	-	-	1	-	2	2	2	X	X
Potassium Hydroxide (70%)	-	X	-	-	-	-	1	-	-	-	X	X	-
Potassium Hydroxide (70% Hot)	-	-	-	-	-	-	1	-	X	-	X	X	-
Potassium Iodide	1	1	-	1	-	-	1	1	1	2	2	-	-
Potassium Nitrate	1	1	-	1	-	-	1	1	1	1	2	2	2
Potassium Nitrate (1% To 5%)	1	1	-	-	-	-	1	-	1	1	1	1	2
Potassium Permanganate	1	2	-	-	-	-	1	2	1	2	2	2	-
Potassium Permanganate (5%)	1	1	-	-	-	-	1	1	1	1	1	-	-
Potassium Persulfate	-	-	-	-	-	-	1	-	-	-	-	-	-
Potassium Phosphate	1	-	-	1	-	-	-	X	2	2	X	-	-
Potassium Sulfate	1	1	-	1	-	-	1	1	1	2	2	-	-
Potassium Sulfate - 1% & 5%	1	1	-	-	-	-	1	1	1	1	1	X	-
Potassium Sulfide	1	1	-	-	-	-	1	-	2	2	2	-	-
Potassium Sulfite	1	1	-	1	-	-	1	-	1	1	1	-	-
Potassium Thiocarbonate	1	-	-	1	-	-	-	-	-	-	-	-	-
Primatol A, S, P (Ag Spray)	-	-	-	-	-	-	1	-	-	-	-	-	-
Propane Gas	X	X	-	-	-	X	1	-	1	1	1	-	1
Propionic Acid	X	X	-	-	-	-	1	-	1	-	2	2	-
Propyl Acetate	X	X	-	2	-	-	1	-	1	-	-	-	-
Propyl Alcohol	1	1	2	1	-	X	1	1	1	1	1	-	2
Propylene (Liquid Or Gas, Ambient)	X	X	-	1	-	-	1	2	1	1	1	1	-
Propylene Dichloride	-	-	-	-	-	-	1	-	1	2	1	X	-
Propylene Glycol	1	1	-	1	1	1	1	2	1	1	1	-	-
Propylene Oxide	X	X	-	-	-	-	-	2	1	1	2	-	-
Purina Insecticide	X	X	-	-	-	-	1	2	1	1	1	1	2
Puropale RX Oils	-	1	-	-	-	2	1	1	1	1	1	1	1
Pyranol, Transformer Oil	2	1	-	-	-	-	1	-	1	1	1	-	-
Pydraul	X	X	-	-	-	-	1	-	-	-	-	-	-
Pydraul 10E, 29E-LT, 30E, 60, 65E, 115E	X	X	-	2	-	-	1	-	1	1	1	1	1
Pydraul 135	-	X	-	2	-	-	1	2	1	1	1	-	-
Pydraul 150	X	X	X	2	X	2	1	2	1	1	1	1	1
Pydraul 280	X	X	X	2	X	2	1	2	1	1	1	-	-
Pydraul 312	X	X	X	2	-	2	1	1	1	1	1	-	-
Pydraul 50E	-	-	-	2	-	2	1	1	1	1	1	-	-
Pydraul 540	X	X	X	2	X	X	1	X	1	1	1	-	-
Pydraul 625	X	X	X	2	X	2	1	2	1	1	1	-	-
Pydraul A-200	X	X	X	2	X	X	1	2	1	1	1	-	-
Pydraul F-9	X	X	X	2	X	2	1	1	1	1	1	-	-
Pyridine (50%)	X	X	-	-	X	1	1	-	1	1	1	1	1
Pyrogard 160, 230, 630	-	-	-	-	-	-	1	-	1	1	1	-	-
Pyrogard 51, 53, 55	-	X	-	-	-	-	1	-	1	1	1	-	-
Pyrogard C, D	-	1	-	-	-	2	1	1	1	1	1	1	1

○ Cover stock rating only; Rating for tube stock "X"  
\*Use Gates fuel hose or contact Denver Product Applications Department.

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers						Couplings & Adapters							
	Trade Names						Carbon Steel Stainless Steel 304 Stainless Steel 316	Aluminum	Brass					
	A	C	C <sub>2</sub>	J	Z									
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon						
<b>R</b>														
Ramrod (Ag Spray)	-	-	-	-	-	-	1	1	1	1	1	1	1	
Rando Oils	-	1	-	-	-	-	2	1	1	1	1	1	1	
Rape Seed Oil	2	X	-	-	X	-	-	1	2	1	1	1	1	
Red Oil (Comm. Oleic Acid, MIL-H-5606)	2	2	2	1	2	-	-	1	1	2	2	1	1	2
Refined Wax (Petroleum)	2	1	2	-	-	-	-	2	1	1	1	1	1	-
Regal Oils R&O	-	1	-	-	-	-	2	1	1	1	1	1	1	1
Richfield Weed Killer	X	2	-	-	X	-	-	1	-	-	-	-	-	-
Round Up	2	2	-	-	-	-	-	1	1	2	1	1	1	1
Rubilene Oils	-	1	-	-	-	-	-	2	1	1	-	-	-	-
<b>S</b>														
Salicylic Acid	1	X	-	-	-	-	-	1	1	1	1	2	-	-
Salt Water (Sea Water)	2	2	2	-	2	1	1	1	1	2	1	1	X	2
Santosafe W-G15, W-G20, W-G30	-	1	-	-	-	-	2	1	1	1	1	1	1	1
Santo Safe 300	X	X	-	-	-	-	-	1	-	1	1	1	1	-
Sevin	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Sewage	2	2	2	1	2	-	-	1	1	X	1	1	2	1
SFR Fluid B (Shell)	-	X	-	-	-	-	-	1	-	-	-	-	-	-
SFR Fluid C (Shell)	-	X	-	-	-	-	-	1	-	-	-	-	-	-
Shellac	2	1	-	-	-	-	-	1	1	1	1	1	1	-
Shellac (Bleached)	2	1	-	-	-	-	-	1	1	1	1	1	1	2
Shellac (Orange)	2	1	-	-	-	-	-	1	1	1	1	1	1	2
Silicone Greases	2	2	2	-	2	-	-	1	1	1	1	1	1	1
Silicone Oils	2	2	2	-	2	-	-	1	1	1	1	1	1	1
Silver Cyanide	1	-	-	-	-	-	-	-	-	1	1	X	-	-
Silver Nitrate	1	1	1	1	1	-	-	1	1	2	1	1	1	2
Skydrol 500A & 7000	X	X	X	2	X	-	-	1	1	1	1	1	-	-
Soap Oil	X	X	-	-	X	-	-	1	-	1	1	1	-	-
Soap Solutions	2	1	2	1	1	1	1	1	1	1	1	1	1	1
Soda Ash (Sodium Carbonate)	1	1	1	1	1	1	1	1	1	1	1	1	X	2
Soda Water	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Sodium Acetate	X	X	X	1	X	2	1	1	1	1	1	1	1	1
Sodium Benzoate	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Sodium Bicarbonate	1	1	1	1	1	1	1	1	1	2	1	1	2	2
Sodium Bisulfate (Niter Cake)	1	1	1	1	1	1	1	1	X	2	1	X	X	
Sodium Bisulfite	1	1	1	1	1	1	1	1	2	1	1	2	-	-
Sodium Borate	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Sodium Carbonate	1	1	1	1	1	1	1	1	2	2	2	X	2	-
Sodium Chlorate	2	1	-	-	1	1	1	1	2	2	2	X	-	-
Sodium Chloride	1	1	1	1	1	1	1	1	2	2	1	X	X	-
Sodium Chloride - 2%	1	1	-	-	-	-	1	1	2	2	1	X	X	-
Sodium Chloride - 5%	1	1	-	-	-	-	1	1	-	2	1	X	X	-
Sodium Chloride - 5% @ 150°F	1	1	-	-	-	-	1	1	-	2	1	-	X	-
Sodium Chloride Saturated	1	1	-	-	-	-	1	1	-	1	1	X	-	-
Sodium Chloride Saturated (Boiling)	-	-	-	-	-	-	1	-	-	2	1	X	-	-
Sodium Chloride Slurry	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Sodium Cyanide	1	1	1	1	1	1	1	1	2	1	1	X	X	-
Sodium Dichromate	2	1	-	1	2	1	1	1	-	-	-	-	-	-
Sodium Ferricyanide	-	-	-	-	-	-	-	1	-	2	2	2	-	-
Sodium Ferrocyanide	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Fluoride	-	1	-	-	-	-	-	1	-	2	2	2	-	-
Sodium Fluoride (5%)	-	1	-	-	-	-	-	1	-	2	2	2	-	-
Sodium Fluoride (70%)	-	-	-	-	-	-	-	1	-	-	2	-	-	-
Sodium Hydrosulfide	1	X	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Hydrosulfite	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Hydroxide	2	2	-	-	-	-	-	-	2	-	-	-	X	-
Sodium Hydroxide (3 Molar)	2	2	-	-	-	-	-	-	-	-	-	-	X	-
Sodium Hydroxide (10%)	-	-	-	1	-	-	-	1	-	-	-	-	-	-

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS







Chemical Resistance Table

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

Table with columns: Rating Scale (1 Excellent, 2 Good resistance, X Not recommended, - Testing recommended), Gates Hose Polymers (Trade Names: A C C2 J Z), Couplings & Adapters (Carbon Steel, Stainless Steel 304, Stainless Steel 316, Aluminum, Brass), Chemical Name, and resistance ratings.

Table with columns: Rating Scale (1 Excellent, 2 Good resistance, X Not recommended, - Testing recommended), Gates Hose Polymers (Trade Names: A C C2 J Z), Couplings & Adapters (Carbon Steel, Stainless Steel 304, Stainless Steel 316, Aluminum, Brass), Chemical Name, and resistance ratings. Includes a section for temperatures (T) ranging from 150°F to 316°F.

○ Cover stock rating only; Rating for tube stock "X" \*Use Gates fuel hose or contact Denver Product Applications Department.



# Chemical Resistance Table

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers						Couplings & Adapters				
	Trade Names						Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
	A	C	C <sub>2</sub>	J	Z						
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon			
Type III Fuel (MIL-3136)											
ASTM Fuel B	X	1	-	-	-	1	-		1	1	1
<b>U</b>											
Ucon Hydrolube Types 150CP, 200CP	-	1	-	-	-	2	1	1	1	1	1
Ucon Hydrolube Types 275CP, 300CP, 550CP	-	-	-	-	-	1	-	-	-	-	-
Ucon M1	-	1	-	-	-	2	1	1	1	1	1
Union ATF Dexron	-	1	-	-	-	2	1	1	1	1	-
Union ATF Type F	-	1	-	-	-	2	1	1	1	1	1
Union C-2 Fluid	-	1	-	-	-	2	1	1	1	1	-
Union C-POil	-	1	-	-	-	2	1	1	1	1	1
Union Hydraulic Oil AW	-	1	-	-	-	2	1	1	1	1	1
Union Hydraulic Tractor Fluid	-	1	-	-	-	2	1	1	1	1	1
Urea Solution	1	2	-	1	1	2	1	1	1	1	2
<b>V</b>											
Varnish	X	X	X	-	X	-	1	1	2	1	1
Vegetable Oils	2	1	2	1	-	2	1	1	1	1	2
Vegetable Oil (Hot)	-	-	-	-	-	1	1	1	2	2	2
Versilube	1	1	-	-	-	1	-	1	1	1	-
Versilube F-50, F-44	2	2	2	-	2	2	1	1	1	1	1
Vinegar	2	X	X	2	X	-	1	1	X	2	X
Vinyl Acetate	X	X	X	1	X	-	1	-	2	1	2
Vinyl Chloride (Chloroethylene, Monomer)	X	X	X	X	X	-	1	-	2	1	2
Vitrea Oils	X	X	X	-	-	2	1	1	1	1	-

Rating Scale: 1 Excellent 2 Good resistance X Not recommended - Testing recommended	Gates Hose Polymers						Couplings & Adapters				
	Trade Names						Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
	A	C	C <sub>2</sub>	J	Z						
Chemical Name	Neoprene	Nitrile	Nitrile/PVC	CPE	Hypalon	Urethane (cover rating only)	PTFE	Nylon			
<b>W</b>											
Water	1	1	1	1	1	1	1	1	2	1	1
Water, Acid Mine	2	X	-	-	-	1	1	1	X	2	2
Water, Brine	2	2	-	-	1	1	1	1	X	2	2
Water Deionized, (DeminerIALIZED)	-	-	-	-	-	1	-	-	-	-	-
Water, Distilled	2	1	-	-	1	1	1	1	X	1	1
Water, Fresh	1	1	-	-	-	1	1	1	X	1	1
Water In Oil Emulsions	-	-	-	-	-	2	1	1	-	-	-
Water, Potable (FDA Tube Only)	Use FDA Hose Only						-	-	-	-	-
Water, Salt	2	1	-	-	-	1	1	1	X	2	2
White & Bagley No. 2190 Cutting Oil	2	1	-	-	-	1	-	-	-	-	-
Wines	2	1	1	1	1	-	1	1	2	2	2
Wood Oil	2	1	-	1	2	1	1	1	1	1	1
<b>X</b>											
Xylene	X	X	-	X	-	2	1	X	2	2	2
<b>Z</b>											
Zeric	-	1	-	-	-	2	1	2	-	-	-
Zinc Acetate	2	X	-	-	X	-	1	2	1	1	1
Zinc Chloride Solutions	1	1	1	1	1	-	1	1	X	2	1
Zinc Chromate	-	-	-	1	1	-	1	-	-	1	-
Zinc Hydrate	-	-	-	-	-	2	1	-	-	-	-
Zinc Sulfate Solutions	2	2	2	1	2	-	1	2	X	2	1

○Cover stock rating only; Rating for tube stock "X"  
\*Use Gates fuel hose or contact Denver Product Applications Department.

EQUIPMENT
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBALSPIRAL COUPLINGS
PCM/PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMO-PLASTIC COUPLINGS
FIELD ATTACHABLE G1 AND G2 COUPLINGS
FIELD ATTACHABLE C5 AND C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS

