



CHEMICAL RESISTANCE TABLES





CHEMICAL RESISTANCE TABLE

The Chemical Resistance Table is intended as a guide only. Ratings are based on the best data available. Unless otherwise stated, ratings are based on 100% concentrated or saturated solutions and up to +100 °F (+38 °C). These ratings do not cover all possible variations of all factors, such as solvents, elevated temperatures, degradation, or fluid contamination. Testing under actual conditions is the best way to ensure chemical compatibility for critical applications. For specific information contact Gates Fluid Power Product Application. Phone (303) 744-5070. Email: fppasupport@gates.com.

“1” Preferred: Constant Contact – Minor or no effect. Approved for continuous contact. Factors such as temperatures, concentration, etc., may reduce service life.

“2” Acceptable: Intermittent Contact – Intended for transfer service and hose should be drained after each use. Prolonged exposure may result in minor to moderate deterioration and/or solution discoloration. Factors such as temperatures, concentration, etc., may reduce service life.

“X” Not Recommended – Unsatisfactory and should not be used.

- **(Dash)** – Insufficient data. Testing recommended.

NOTE 1. Fluid permeation needs to be considered. Hose may show no sign of degradation; however, performance and service life may be negatively affected by fluid permeation through the tube and reinforcement layers.

NOTE 2. Coupling material ratings are for reference only. Specific ratings are available and should be obtained by coupling manufacturers. See coupling section for additional contact information.

NOTE 3. The nature of certain chemicals and specific applications is such that Gates cannot offer a suitable hose.

NOTE 4. If a chemical is not listed in the table, contact Gates Fluid Power Product Application.
Phone (303) 744- 5070. Email: fppasupport@gates.com.

NOTE 5. For Gates Acid/Chemical Hose, permanent-style couplings must be used for service temperatures above +125°F(+52°C).

FOR CERTAIN APPLICATIONS SPECIFIC HOSES MUST BE USED.

Steam – Hose from the Steam Hose line

Edible Products – FDA, 3A, USDA

Concentrated Chemicals – Hose from the Acid-Chemical Hose line

Gaseous Fuels – LP350 Hose only

Gasoline and Petroleum Products – Hoses from the Petroleum Transfer Hose line

Hydraulic – Hoses from Hydraulic Products Catalog

PHYSICAL PROPERTIES AFTER EXPOSURE TO OIL			
ARPM Designation	Oil Resistance	Volume Change Maximum	Tensile Strength Retained
Class A	High	25%	80%
Class B	Medium	65%	50%
Class C	Limited	100%	40%



CHARACTERISTICS AND RESISTANCE OF TUBE AND COVER COMPOUNDS

GATES TYPE	COMMON NAME OR TRADE NAME	ELASTOMER	WEATHER/OZONE	PHYSICAL STRENGTH
A	Chloroprene	Polychloroprene (CR)	Very Good	Very Good
B1	Modified EPDM	Ethylene Propylene Diene (EPDM)	Very Good	Good
C	Buna-N Nitrile	Acrylonitrile Butadiene (NBR)	Poor	Good
C1	HNBR	Hydrogenated Nitrile (HNBR)	Very Good	Excellent
C2	Modified Nitrile	Acrylonitrile Butadiene (NBR)	Good	Good
C4	Mod Carbox Nitrile	Carboxylated Nitrile (XNBR)	Good	Excellent
D	Gum Rubber, Buna-S	Natural Rubber (NR) or Styrene Butadiene (SBR)	Fair	Very Good
G	PVC	Polyvinyl Chloride (plasticized)	Very Good	Good
H	Butyl	Isobutylene & Isoprene (IIR)	Poor	Fair
J	CPE	Chlorinated Polyethylene (CM)	Very Good	Good
K	Galtron™	Cross Linked Polyethylene (XLPE)	Excellent	Good
L	UHMWPE	Ultra-High Molecular Weight Polyethylene (UHPE)	Very Good	Very Good
M	Hypalon®1	Chlorosulfonated Polyethylene (CSM)	Good	Good
MQ	Silicone	Silicone Rubber	Very Good	Good
P	EPDM	Ethylene Propylene Diene (EPDM)	Very Good	Good
S	Sanitron™	Thermoplastic Vulcanizate (TPV)	Excellent	Good
T	FEP	Fluorinated Polyethylene (FEP)	Excellent	Very Good
U	Urethane	Polyurethane (EU)	Very Good	Excellent
V	Viton®1, Fluorel®2	Fluorocarbon Fluoroelastomer (FKM)	Excellent	Very Good
Z	Nylon	Polyamide Resin (PA)	Excellent	Very Good

NOTE: Ratings are for general or typical elastomer formulations. Some hoses have special formulations that change the performance of these characteristics to be more suitable for certain applications, such as improved temperature range or resistance to biodiesel. For selection assistance refer to product catalog pages and also the Hose Finder and Chemical Resistance sections at the back of this catalog.

Contact Gates Product Application Engineering
303-744-5070
fppasupport@gates.com

GATES TYPE	COMMON NAME OR TRADE NAME	ABRASION	PERMEATION TO GASES	PERMEATION TO PETROLEUM OILS	PERMEATION TO REFINED FUELS	HIGH TEMP	LOW TEMP
A	Chloroprene (Neoprene)	Very Good	Fair	Good	Fair	Good	Good
B1	Gates Proprietary Blend	Good	Poor	Poor	Poor	Excellent	Fair
C	Buna-N Nitrile	Fair	Good	Excellent	Excellent	Good	Fair
C1	Hydrogenated Nitrile (HNBR)	Good	Fair	Very Good	Very Good	Excellent	Good
C2	Modified Nitrile (cover)	Good	Good	Good	Good	Good	Fair
C4	Modified Carboxylated Nitrile (cover)	Excellent	Good	Good	Good	Good	Fair
D	Gum Rubber, Buna-S	Excellent	Poor	Poor	Poor	Good	Fair
D2	Natural Rubber (Food Grade)	Excellent	Poor	Poor	Poor	Good	Good
D3	Natural Rubber (Food Grade)	Excellent	Poor	Poor	Poor	Good	Good
G	PVC	Very Good	Good	Good	Fair	Good	Fair
H	Butyl	Fair	Poor	Poor	Poor	Good	Good
J	CPE	Good	Good	Good	Good	Good	Good
K	Galtron™	Good	Fair	Fair	Fair	Good	Fair
L	UHMWPE	Excellent	Good	Excellent	Good	Good	Fair
M	Hypalon®	Good	Good	Good	Good	Good	Good
MQ	Silicone Rubber	Poor	Poor	Poor	Poor	Excellent	Excellent
P & P1	EPDM	Good	Poor	Poor	Poor	Excellent	Fair
P2	Special for Steam Hose	Fair	Poor	Poor	Poor	Excellent	Poor
S	Sanitron™	Good	Poor	Poor	Poor	Excellent	Good
T	FEP	Very Good	Excellent	Excellent	Excellent	Excellent	Good
U	Urethane	Excellent	Fair	Good	Fair	Fair	Good
V	FKM Viton®, Fluorel®	Good	Good	Excellent	Excellent	Excellent	Good
Z	Nylon	Very Good	Excellent	Excellent	Excellent	Good	Good

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS				
		CHEM MASTER™ XTREME FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	Gafron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC							
A																						
Absorption Oil	Liquid	1	2	2	X	X	1	X	X	2	X	1	2	1	1	-	-	-	-	1	-	
Acetal	Colorless Liquid	1	1	1	1	1	-	-	-	1	X	-	1	-	-	-	-	-	-	1	-	
Acetaldehyde	Colorless Liquid	1	1	1	1	X	2	2	X	1	X	X	1	X	X	1	1	1	1	1	1	
Acetamide	Liquid above 176°F (80°C)	1	1	2	1	2	2	X	X	2	2	X	-	1	-	-	-	2	-	1	X	
Acetic Acid (40% or less)	Clear Colorless Liquid	1	1	1	1	1	X	2	X	2	1	X	2	1	-	-	X	2	2	2	X	
Acetic Acid (56% or less)	Clear Colorless Liquid	1	1	1	1	1	X	2	X	2	1	X	2	1	X	2	X	2	2	2	X	
Acetic Acid (85% or less)	Clear Colorless Liquid	1	1	1	X	2	X	2	X	X	X	X	X	X	X	-	2	2	-	-	X	
Acetic Acid (Glacial - 99.4%)	Clear Colorless Liquid	1	1	X	X	X	X	2	X	X	X	X	1	X	X	-	2	2	-	-	X	
Acetic Acid, Anhydride	Clear Colorless Liquid	1	-	X	-	-	X	X	X	2	-	2	1	X	X	-	2	2	-	-	X	
Acetic Anhydride (Acetic Oxide)	Colorless Liquid	1	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	
Acetic Ether (Ethyl Acetate)	Colorless Liquid	1	1	1	2	2	X	X	X	2	X	X	2	1	X	X	X	1	1	1	1	
Acetic Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	1	-	X	X	-	2	X	2	1	X	X	X	2	2	2	X	
Acetone (Dimethylketone)	Colorless Liquid	1	1	1	1	2	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2	
Acetone Cyanohydrin	Colorless Liquid	1	1	2	2	2	-	X	X	-	2	-	-	2	-	-	-	-	-	-	-	
Acetonitrile (Methyl Cyanide)	Colorless Liquid	1	1	2	1	X	X	2	2	2	2	-	2	1	-	1	-	-	-	-	-	
Acetophenone	Colorless Liquid	1	2	2	2	1	X	X	X	X	1	X	-	-	-	-	-	-	-	-	2	
Acetyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-	
Acetyl Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	
Acetyl-P-Toluidine (In Ether or Alcohols)	In Alcohol or Ether	1	1	1	1	1	-	X	X	-	2	X	-	1	-	-	-	-	-	-	-	
Acetylene	Gas	SPECIAL HOSE REQUIRED																				
Acetylene Dichloride (Dichloroethylene)	Colorless Liquid	1	X	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	X	
Acetylene Tetrachloride	Colorless Liquid	1	X	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	
Acrolein (Hydroquinone Inhibited)	Colorless to Yellow Liquid	1	1	1	2	X	-	-	-	-	2	X	-	-	-	-	-	-	-	-	-	
Acrylamide	Colorless Crystals	1	1	2	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Acrylates (HEA or HPA)	Colorless Liquid	1	1	1	1	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	
Acrylic Acid	Colorless Liquid	1	1	1	1	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	
Acrylic Acid (Glacial 97%)	Colorless Liquid	1	1	1	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	
Acrylic Emulsion	Liquid	1	1	1	X	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Acrylonitrile	Colorless Liquid	1	2	2	1	X	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	
Adipic Acid (70°F)	White Crystals	1	1	X	1	1	X	X	1	X	-	X	-	-	X	X	-	-	-	-	-	
Aeroshell 7A, 17 Grease	Liquid	1	-	-	-	-	1	-	-	2	-	-	-	-	-	-	1	1	1	1	-	
Air, 212°F (100°C)	Colorless Gas	1	1	2	1	1	1	2	X	1	1	1	1	1	X	2	1	1	1	1	1	
Air, 257°F (125°C)	Colorless Gas	1	1	X	1	1	X	X	X	2	1	1	1	1	X	X	-	-	-	-	-	
Air, 300°F (149°C)	Colorless Gas	1	1	X	1	1	X	X	X	1	1	X	X	X	X	-	-	-	-	-	-	
Air, Ambient	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Aircraft Hyd. Oil AA	Liquid	1	1	-	-	X	1	-	-	X	-	-	-	-	-	-	1	1	1	1	1	
Alachlor (Lasso)	Colorless Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	
Alkaline Liquid (NOS)	In Water Solutions	1	1	1	1	1	-	-	-	1	2	-	1	-	-	-	-	-	-	-	-	
Alkyaryl Polyether	Alcohol	-	1	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	
Alkyd Resin (Thermosetting Polymer)	Varies	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alkylaryl Sulfonate (Alkylbenzene Sulfonate)	Powder	1	1	1	-	-	1	-	1	-	1	X	1	-	-	1	1	-	-	-	-	
Allomalaic Acid (Fumaric Acid) Solution	Liquid	1	1	-	-	2	1	2	2	-	-	1	-	-	-	X	-	1	1	-	-	
Allyl Alcohol	Colorless Liquid	1	1	1	1	1	1	-	1	1	1	1	1	1	X	X	-	-	-	-	-	
Allyl Bromide	Colorless to Yellow Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Allyl Chloride	Colorless Liquid	1	1	X	X	X	X	X	X	X	1	-	2	1	X	-	1	1	-	-	2	
Alpha Methylstyrene	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	-	X	1	X	-	-	-	-	-	-	
Alpha Olefin Sulfonate	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS							
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC							
Alpha Picoline	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Alum (Aluminum Sulphate or Other)	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	X	-	-	X	X	2	X	X	1	
Alum, Potash (Aluminum Potassium Sulfate)	White Crystals	1	-	-	-	-	-	-	1	-	-	-	-	X	-	-	X	2	2	X	X	1	
Alumina - Calcined (Conveyed Pneumatically)	Granular	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
Alumina Trihydrate (Conveyed Pneumatically)	White Crystalline Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
Aluminum Acetate	White Powder	1	1	-	-	-	-	1	1	-	-	X	-	-	-	-	-	1	1	-	X	-	
Aluminum Alkyl (ie Triethylaluminum)	Colorless Liquid	X	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-		
Aluminum Bromide	White to Yellow Crystals	1	1	-	-	1	1	1	1	1	1	1	1	-	-	-	X	2	2	-	X	-	
Aluminum Chloride Solution	White to Yellow Solution	1	1	X	1	1	1	1	1	-	1	1	-	1	-	-	X	2	2	X	X	1	
Aluminum Chloride, Anhydrous	White to Yellow Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
Aluminum Chlorohydrate Solution (Up to 50%)	White Solution	1	1	1	1	1	1	-	-	-	1	1	-	1	-	-	-	-	-	-	-		
Aluminum Fluoride	White Crystals	1	1	-	-	-	-	1	1	-	-	-	-	-	-	-	1	X	2	2	2	X	1
Aluminum Formate (Di & Tri In Water)	In Hot Water	1	1	1	1	1	1	X	X	-	1	X	-	1	-	-	-	-	-	-	-		
Aluminum Hydroxide (Alumina Trihydrate)	In Mineral Acid or Caustic Soda	1	1	1	1	-	X	X	X	1	1	2	-	1	X	X	-	1	1	-	1	1	
Aluminum Nitrate	In Cold Water	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	X	1	1	2	-	1	
Aluminum Phosphate Solution	In HCl or HNO3 (slightly soluble)	1	1	1	-	-	X	X	X	X	-	1	-	-	X	X	-	-	-	-	-		
Aluminum Salts	Varies	1	1	-	-	1	1	1	1	1	1	-	1	-	-	1	-	2	2	2	-	1	
Aluminum Sulfate	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1	
Aluminum Sulfate Solution	In Water	1	1	1	1	1	1	1	1	-	1	1	-	1	-	-	X	X	2	X	X	1	
Aluminum Sulfate Solution (49.7% H2O)	Liquid	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	X	X	2	X	X	1	
Amines (A class of Organic Compounds)	Varies	1	1	1	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-		
Amines (Aromatic - IE P-Toluidine)	White Plates (Solid)	1	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-	-	-		
Amines (Mixed)	Varies	1	2	1	-	2	2	2	2	2	2	X	-	-	-	-	-	1	-	X	X	-	
Amines (Primary, Secondary, Tertiary, Etc)	Varies	1	2	1	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-		
Aminodiphenylamine	Purple Powder	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Aminoethanol (Ethanolamine)	Colorless Viscous Liquid	1	2	1	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-	
Aminoethylethanolamine	Liquid	1	2	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-		
Ammonia (Anhydrous)	Gas or Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-		
Ammonia (Aqueous up to 30% NH3)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	-	1	1	-	X	1	
Ammonia Liquor	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ammoniated Fatty Acid (ie Ammonium Caprylate)	Liquid above 167°F (75°C)	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Ammonium Acetate	In Water	1	1	1	1	1	1	1	1	2	1	1	-	1	2	1	-	1	1	-	X	1	
Ammonium Bicarbonate	White Crystals	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	
Ammonium Bisulfate (50%)	Colorless Liquid	1	1	1	1	1	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-		
Ammonium Carbonate	Colorless to White Powder	1	1	-	-	-	X	-	1	2	-	-	-	-	-	1	1	1	1	-	-	1	
Ammonium Chloride	White Crystals	1	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	2	2	-	X	1	
Ammonium Chloride Solution	Liquid	1	1	-	-	1	2	1	1	X	1	-	1	1	X	1	-	2	2	-	X	1	
Ammonium Fluoride	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
Ammonium Hydroxide (16%, 20%, 26%, & 30%)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	2	-	-	-	-	2	1	1	-	X	1	
Ammonium Hydroxide (up to 30% NH3)	Colorless Liquid	1	1	1	1	1	2	X	2	2	2	2	1	1	X	X	2	1	1	-	X	1	
Ammonium Metaphosphate	White Powder	1	1	-	-	1	2	2	2	2	1	-	2	-	-	2	1	1	1	X	-	1	
Ammonium Nitrate	Colorless Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1	
Ammonium Nitrate Fertilizer (20.5% N, or 33.5% N)	Aggregate	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1	
Ammonium Nitrate Prills and Oil	Aggregate	1	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1	
Ammonium Nitrate Solution (up to 83%)	Liquid	1	1	1	1	1	1	-	1	1	-	1	1	1	1	-	1	1	1	2	X	1	
Ammonium Nitrite	Colorless Crystal	1	1	-	-	-	X	X	X	2	-	-	-	1	-	-	-	1	1	-	-	1	
Ammonium Persulfate	Solution in Water	1	1	-	-	-	X	-	-	X	-	X	-	-	-	-	-	1	1	-	X	X	
Ammonium Phosphate	White Crystals or Powder	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	-	1	

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS				
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaetron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Ammonium Phosphate Solution	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	X	2	1	X	-	1
Ammonium Polysulfide Solution	Yellow Solution	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Sulfate	Gray to White Crystals	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	X	X	1	
Ammonium Sulfide	Yellow Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	X	1	
Ammonium Sulfide Solution (40-44% or less)	Liquid	1	1	-	1	2	1	1	1	-	1	1	1	-	1	1	1	1	X	X	1	
Ammonium Thiocyanate (50-60% less)	In Water	1	1	1	1	1	1	1	1	1	1	1	1	-	-	1	1	1	-	-	1	
Amyl Acetate (Banana or Pearl Oil)	Colorless Liquid	1	1	1	-	2	X	X	X	X	2	X	X	X	1	X	X	1	X	1	X	
Amyl Alcohol	Colorless Liquid	1	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-	
Amyl Chloride (Chloropentane)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	1	1	-	-	X	
Amyl Chlorides (mixed)	Straw to Purple Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	-	X	
Amyl Chloronaphthalene	-	1	1	2	X	X	X	X	X	X	1	X	X	1	-	-	1	1	-	-	-	
Amyl Naphthalene	-	1	1	-	-	X	X	X	X	X	1	X	X	-	-	-	1	1	-	-	-	
Amyl Phenol	Clear Straw Colored Liquid	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	
Amylamine	Colorless Liquid	1	X	-	-	X	2	-	X	X	X	X	2	-	-	-	-	-	-	-	-	
Amylbenzene (sec amylbenzene)	Clear Liquid	1	2	2	X	X	2	X	X	2	X	1	-	-	-	-	-	-	-	-	-	
Anethole (anise camphor)	White Crystals/Liquid 73°F (23°C)	1	2	-	-	-	X	X	X	X	1	X	X	X	-	2	1	1	2	X	1	
Anhydrous Ammonia (R 717)	Gas or Liquid	NO HOSE AVAILABLE																-	-	-	-	-
Aniline	Colorless Oily Liquid	1	2	X	1	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Aniline Dyes	-	1	1	-	1	2	X	X	X	X	2	2	X	2	-	-	X	1	1	-	-	2
Aniline Hydrochloride	White Crystals	1	1	-	-	2	2	2	2	X	2	-	-	-	-	-	X	X	-	X	2	
Aniline Oil (Aniline)	Colorless Oily Liquid	1	2	X	1	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Animal Fat (Lard)	White Solid/Liquid > 108°F (42°C)	1	2	2	X	X	1	X	X	2	X	1	X	2	1	-	1	1	1	1	X	-
Animal Gelatin	-	1	-	1	-	-	1	-	-	1	-	-	-	-	-	1	-	1	1	-	-	-
Animal Grease, Inedible, Liquid	Liquid	1	-	-	-	X	1	-	X	2	X	1	2	2	-	-	-	-	-	-	-	
Animal Oils	Solid to Liquid	1	-	-	2	-	1	-	2	-	-	-	-	1	1	1	1	1	1	1	-	
Ant Oil (Furfural)	Colorless to Reddish Brown Liquid	1	1	-	2	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2
Antifreeze (Glycol Base)	Liquid	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Antimony Chloride (50%)	White Powder	1	1	1	-	-	-	-	-	2	1	-	-	1	1	X	X	X	-	-	1	
Antimony Pentachloride	Reddish-Yellow Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Antimony Salts	White Crystal	1	1	-	-	1	2	-	-	-	1	1	-	-	-	1	-	-	-	-	-	
Aqua Ammonia (Ammonium Hydroxide)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	2	X	X	2	1	1	-	X	1
Aqua Regia (Nitrohydrochloric Acid)	Fuming Yellow Liquid	1	2	X	X	X	X	X	X	X	X	1	X	2	X	X	-	X	X	-	-	X
Argon, Compressed	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	
Aromatic Hydrocarbons	Typically Colorless Liquids	1	2	2	X	X	2	X	X	X	X	1	X	X	1	X	1	1	1	2	2	-
Arsenic Acid	In Water	1	1	1	2	2	-	X	X	-	2	1	-	1	-	2	-	1	2	-	2	
Arsenic Trioxide	In Acid	1	1	1	2	X	2	X	X	2	X	1	X	-	1	-	-	-	-	-	-	
Askarel (Transformer Oil)	Varies	1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	1	1	-	1	2	
Asphalt	Varies	1	2	X	X	X	2	X	X	-	X	1	-	-	X	X	1	1	1	-	1	
Asphalt (Blown)	Black Solid	-	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
Asphalt (Cut Back)	Black Liquid	1	X	X	X	X	2	X	X	2	X	1	X	X	2	X	1	1	1	-	1	
Asphalt Emulsion	Black Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asphalt Paint	Black Liquid	1	2	X	X	X	2	X	X	-	X	1	X	-	2	X	-	-	-	-	-	
Asphaltene	In Carbon Disulfide	1	2	X	X	X	2	X	X	2	X	1	X	X	1	-	-	-	-	-	-	
ASTM Oil No. 1	Brown Liquid	1	1	1	2	X	1	X	X	1	X	1	2	1	1	2	1	1	1	1	1	2
ASTM Oil No. 2	Brown Liquid	1	1	1	X	X	1	X	X	2	X	1	2	1	1	X	1	1	1	1	1	X
ASTM Oil No. 3	Brown Liquid	1	1	1	X	X	1	X	X	X	1	X	1	1	X	1	1	1	1	1	1	X
ASTM Reference Fuel A	Liquid	1	1	1	2	X	1	X	X	1	X	1	1	1	1	2	1	1	1	1	1	X
ASTM Reference Fuel B	Liquid	1	2	1	X	X	1	X	X	2	X	1	X	2	1	X	1	1	1	1	1	X

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS							
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC							
ASTM Reference Fuel C	Liquid	1	2	2	X	X	2	X	X	X	X	1	X	2	1	X	1	1	1	-	1	X	
ATF (Automatic Transmission Oil)	Liquid	1	1	2	X	X	1	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-	
B																							
Baltic Types 100, 150, 200, 300, 500	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	2	
Banvel (Ag Spray, Concentrated)	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
Bardol B	Dark Colored Liquid	1	1	-	-	X	X	X	X	X	X	2	X	-	-	-	1	1	1	-	-	-	
Barite (Natural Barium Sulfate)	White to Yellowish Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	1	-	2	1	
Barium Carbonate	White Powder	1	1	-	-	X	1	X	1	1	X	1	X	1	-	1	2	1	1	-	1	1	
Barium Chloride	Colorless Crystals	1	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	1	1	-	2	1	
Barium Hydroxide	White Powder	1	1	1	-	1	1	X	1	1	1	-	1	1	-	X	2	1	1	-	-	1	
Barium Sulfate	White to Yellowish Powder	-	-	-	-	-	-	1	-	-	-	-	X	-	-	-	1	1	1	-	2	1	
Barium Sulfide	Yellowish Green to Gray Powder	1	1	1	-	-	-	1	-	-	1	-	1	-	1	-	X	1	1	-	X	1	
Basic Copper Arsenate	Blue to Green Powder	1	1	-	-	-	2	1	-	-	1	2	-	-	1	1	1	1	1	-	-	-	
BBP (Butyl Benzyl Phthalate)	Clear Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-	-	
Beer	Yellow Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beet Sugar Liquors	Colorless Solution	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	-	X	
Bellows 80-20 Hydraulic Oil	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	X	
Benzaldehyde (Benzoic Aldehyde)	Colorless to Yellow	1	1	1	2	2	X	X	X	X	2	X	X	X	2	X	1	-	-	-	1	-	
Benzene (Benzol)	Colorless to Yellow Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	X	1	1	1	1	1	X
Benzenesulfonic Acid	Liquid above 151°F (66°C)	1	1	1	-	-	X	X	X	2	1	2	-	-	X	X	-	2	X	-	1	-	
Benzidine	Paste	1	2	-	-	X	2	X	1	X	X	-	-	-	-	X	1	1	1	1	1	X	
Benzoic Acid	White Crystals	1	1	1	1	2	X	X	X	X	2	1	2	1	-	X	-	-	-	-	-	-	
Benzoic Aldehyde (Benzaldehyde)	Colorless to Yellow Liquid	1	1	1	2	2	X	X	X	X	2	X	X	2	2	X	1	-	-	1	-	1	
Benzol (Benzene)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	1	X
Benzophenone	White Powder	1	1	-	-	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	
Benzotrithloride	Colorless to Yellow Liquid	1	-	-	X	X	X	X	X	X	1	-	X	2	X	-	-	-	-	-	-	-	
Benzyl Acetate	Water White Liquid	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzyl Alcohol	Water White Liquid	1	1	1	1	2	X	X	X	X	1	1	X	1	X	1	-	-	-	-	-	-	
Benzyl Alcohol, Photo Inhibited	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	1	
Benzyl Benzoate	Water White Liquid	1	1	-	-	2	-	-	-	2	1	-	-	-	-	-	1	1	1	-	-	-	
Benzyl Chloride	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	-	X	2	X	1	-	-	-	-	-	-	
Bicarbonate of Soda	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bio-Diesel (B100)	Liquid below 125°F (52°C)	1	2	2	-	-	2	-	-	-	-	1	2	2	2	X	2	2	1	1	2	1	
Bio-Diesel (B100)	Liquid 125°F (52°C) and Above	1	X	X	X	X	X	X	X	X	1	X	X	2	X	2	2	2	1	1	2	1	
Bismuth Carbonate	White Powder	1	-	-	-	-	-	1	X	-	-	-	-	-	-	-	1	1	1	-	-	1	
Bisphenol A	White Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bitumastic	Liquid	1	-	X	-	X	2	X	X	2	X	2	X	2	-	-	1	1	1	-	1	-	
Black Liquor (RXN Product Pulpwood+NaOH)	Black Alkaline Liquid	1	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1	
Black Sulfate Liquor (See Black Liquor)	Black Alkaline Liquid	1	1	1	1	2	2	X	X	2	2	1	2	X	-	1	1	1	1	-	-	1	
Blast Furnace Gas (Cooled)	Gas	1	1	-	-	-	X	X	X	X	1	X	2	-	X	1	1	1	1	-	1	-	
Bleach (Chlorinated Lime)	White Powder (35- 37% Cl)	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bleach Liquor (Calcium Hypochlorite/H2O)	Clear Solution	1	1	1	1	2	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	
Borax (Sodium Borate)	White Crystals	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1	
Bordeaux Mixture (Slaked Lime & Copper Sulfate)	In Water	1	1	1	1	1	1	2	2	2	1	1	-	-	1	-	1	1	1	-	-	-	
Boric Acid	White Powder or Colorless Scale	1	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	2	1	1	1	X	
Boric Oxide	Colorless Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Brake Fluid (Petroleum Base)	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	1	1	2	1	1	1	-	1	X	
Brake Fluid (Synthetic) DOT2, DOT3, DOT4	Liquid	1	1	-	1	1	X	X	X	X	1	X	X	1	-	2	1	1	1	-	1	-	

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS					
		CHEM MASTER XTREME FEP	CHEM MASTER PLUS XLPE	CHEM MASTER PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Galtron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC							
Brine (Salt)	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1	
Bromine	Dark Reddish Brown Liquid	1	-	-	X	X	X	-	-	X	-	1	-	-	X	X	1	1	1	1	1	-	
Bromobenzene	Colorless Liquid	1	-	-	X	X	-	X	X	-	X	1	-	-	-	X	-	-	-	-	-		
Bromochloroethane	Colorless Liquid	-	-	X	X	X	-	X	X	-	X	X	-	X	X	-	-	-	-	-	-		
Bromochloromethane (Chlorobromomethane)	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	-	1	X	
Bromotoluene	Clear Liquid	1	-	-	X	X	-	X	X	-	X	1	-	X	-	X	-	-	-	-	-		
Bubble Bath Compounds	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bunker Oil	Liquid	1	2	2	X	X	1	X	X	2	X	1	X	-	1	X	1	1	1	1	1		
Butadiene (1, 3)	Gas	1	1	-	X	X	2	X	X	X	X	1	X	-	1	X	-	1	1	-	1	1	
Butanal (Butyraldehyde)	Water White Liquid	1	2	-	-	X	X	X	X	X	X	X	2	-	-	-	-	-	-	-	1	-	
Butandiol (Butylene Glycol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-		
Butane (Gas)	Colorless Gas	USE LPG HOSE ONLY																					
Butane (Liquid)	Liquid	USE LPG HOSE ONLY																					
Butanol (Butyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
Butter	Yellow/White Semi- Solid/Liquid	-	-	-	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-		
Butter Oil (Use FDA Hose)	Yellow to white Liquid	1	-	-	2	-	-	X	X	2	-	-	-	-	-	-	1	1	1	1	1		
Butyric Acid	Colorless Liquid	1	1	1	1	2	-	2	2	X	2	1	X	1	X	-	-	1	1	1	1		
Butyl Carbitol (Diethylene Glycol Butyl Ether)	Colorless Liquid	1	1	-	2	2	X	X	2	2	1	-	1	-	-	-	1	1	1	1	1		
Butyl Cellosolve (EG Monobutyl Ether)	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-		
Butyl Oxitol TMfor EG Monobutyl Ether	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-		
Butyl Acetate	Colorless Liquid	1	2	2	1	X	X	X	X	2	X	X	2	1	1	2	1	1	1	1	1		
Butyl Acrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-		
Butyl Alcohol (Butanol)	Colorless Liquid	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
Butyl Aldehyde	Water White Liquid	1	-	-	-	2	X	-	-	X	-	X	X	2	-	-	-	-	-	-	-		
Butyl Benzyl Phthalate (BBP)	Clear Oily Liquid	1	-	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-		
Butyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-		
Butyl Ether	Colorless Liquid	1	1	-	-	-	2	X	X	2	2	X	-	1	-	-	1	1	1	1	1		
Butyl Ethyl Ether (Ethyl-n-Butyl Ether)	Liquid	1	-	-	-	-	2	-	X	-	X	-	2	-	-	-	-	-	-	-	-		
Butyl Formate	Colorless Liquid	1	-	-	-	-	X	-	X	X	-	-	-	-	-	-	-	-	-	-	-		
Butyl Mercaptan (2-Methyl-2- Butanathiol)	Liquid	1	1	-	X	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-		
Butyl Methacrylate	Colorless Liquid	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Butyl Stearate	Colorless Liquid	1	1	-	-	X	2	X	X	X	1	-	2	-	1	1	1	1	1	1	-		
Butylamine	Colorless Liquid	1	1	-	-	-	X	X	X	X	X	X	2	-	-	1	1	1	1	1	1		
Butylene Glycol (Butandiol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-		
Butyraldehyde (Butanal)	Water White Liquid	1	2	-	-	X	X	X	X	X	X	X	2	-	-	-	-	-	-	-	1		
Butyric Acid	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	X	1	1	1	X	1	1	1	2		
Butyric Anhydride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
C																							
Cadmium Acetate (Soluble in H2O & Alcohols)	In Water or Alcohol	1	-	-	-	-	X	-	X	-	1	X	-	-	-	-	-	-	-	-	-		
Cake Alum (Aluminum Sulfate)	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X		
Cake Alum Solution (Al Sulphate up to 50%)	In Water	1	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-		
Calcine Liquor (Radioactive Waste)	In Water Solution	1	1	-	-	1	1	-	-	-	1	1	-	-	-	-	1	1	1	2	-		
Calcium Acetate	Powder	1	1	-	-	1	X	2	2	X	1	X	X	1	-	-	1	1	1	1	1		
Calcium Aluminate (Soluble in Acids)	In Acid	1	-	-	-	-	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-		
Calcium Aluminate (Tricalcium Aluminate)	Crystals or Powder	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Calcium Arsenate	In Dilute Acid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-		
Calcium Bisulfide (Calcium Hydrosulfide)	In Alcohol or Water	1	1	-	-	-	1	2	2	1	1	1	1	1	-	2	-	2	1	-	X		
Calcium Bisulfite (Calcium Hydrogen Sulfite)	Yellow Liquid	1	1	-	-	-	1	2	2	1	1	1	1	1	-	1	-	1	1	-	-		

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC					
Calcium Bromide Solution	In Water or Alcohol	1	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Calcium Carbonate	Solid White Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calcium Carbonate Slurry	Solid in H2O	1	-	-	-	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-
Calcium Chlorate	In Water or Alcohol	1	1	-	-	2	1	2	2	1	2	-	1	-	-	1	-	2	1	-	1
Calcium Chloride, Dry	White Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	-	2
Calcium Chloride, Liquid (Not For Food)	In Water or Alcohol	1	1	-	1	1	1	1	1	1	1	1	1	1	X	1	-	-	-	-	-
Calcium Chloride, Liquid, Food-grade 33%	In Water	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
Calcium Hydrogen Sulfite (Calcium Bisulfite)	Yellow Liquid	1	1	-	-	-	1	2	2	1	1	1	1	1	-	1	-	1	1	-	1
Calcium Hydrosulfide (Calcium Bisulfide)	In Alcohol or Water	1	1	-	-	-	1	2	2	1	1	1	1	1	-	2	-	2	1	-	X
Calcium Hydroxide (Hydrated or Slaked Lime)	Solid White Powder	1	1	-	1	-	2	1	1	1	1	X	1	1	-	X	X	X	1	-	2
Calcium Hydroxide Solutions	In Glycerol or Acids	1	1	X	-	-	2	-	-	-	-	-	-	-	X	-	2	1	1	X	X
Calcium Hypochlorite	Solid White Crystals	1	2	X	-	-	X	X	X	2	-	2	1	X	2	-	-	-	-	-	-
Calcium Hypochlorite Solutions	In Water or Alcohol	1	1	X	-	-	X	X	X	2	-	2	1	-	1	-	X	2	X	X	1
Calcium Metasilicate (Calcium Silicate)	White Powder	1	1	-	-	-	2	2	1	-	2	1	2	1	-	1	1	1	1	1	-
Calcium Nitrate Solutions	In Water, Alcohol, or Acetone	1	1	-	-	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1
Calcium Oxide (Lime; quick, unslaked)	White to Gray Lumps	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-
Calcium Silicate (Calcium Metasilicate)	White Powder	1	1	-	-	-	2	2	1	-	2	1	2	1	-	1	1	1	1	1	-
Calcium Stearate	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Calcium Sulfate	White Powder or Crystals	1	1	-	-	1	1	-	1	1	1	1	1	1	-	1	1	1	1	-	1
Calcium Sulfide	Yellow to Gray Powder	1	1	-	-	-	1	2	1	2	1	2	1	1	-	2	1	1	1	2	-
Calcium Sulfite (Soluble In Sulfurous Acid)	In Acid	1	1	1	1	1	-	-	-	-	X	1	-	1	-	-	-	-	-	-	-
Caliche Liquors (Sodium Nitrate)	In Water	1	1	-	-	-	1	2	2	-	1	-	1	-	-	-	-	1	1	-	-
Camphene (Liquid above 115°F/46°C)	Liquid above 115°F (46°C)	1	-	-	X	X	-	-	-	-	-	1	X	-	-	-	-	-	-	-	-
Cane Sugar Liquors	In Water	1	1	-	1	2	1	2	2	1	2	-	1	1	-	1	1	1	1	1	2
Caproic Acid	Colorless or Yellow Liquid	1	1	1	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Caprolactam	White Flakes	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Caprolactam, Molten (Above 156°F/69°C)	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Caprylic Acid (Octanoic Acid)	Colorless, Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Carbamates	Crystals	1	1	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-
Carbolic Acid	Liquid above 109°F (43°C)	1	2	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X
Carbolic Acid (Phenol)	White or Pink Crystals	1	2	-	2	X	X	X	X	2	1	X	1	X	X	X	X	1	1	2	X
Carbolic Acid (Phenol, 82-95% in Creosols)	Liquid	1	2	-	-	2	X	X	X	2	2	X	1	X	X	X	X	1	1	2	X
Carbon Dioxide (Dry)	Gas	1	1	-	-	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1
Carbon Dioxide (Wet)	Gas with Water Vapor	1	1	1	-	2	1	2	2	1	2	1	1	-	-	1	1	1	1	1	1
Carbon Disulfide	Clear to Faint Yellow Liquid	1	2	1	-	X	2	X	X	X	X	1	X	2	1	X	2	1	1	2	X
Carbon Monoxide	Gas	1	2	1	-	1	2	X	X	2	X	1	1	-	-	1	1	1	1	1	1
Carbon Tetrachloride (Pyrene)	Colorless Liquid	1	2	X	X	X	X	X	X	X	X	1	X	X	X	X	X	2	2	X	X
Carbonic Acid	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	-	X	X	1	1	2	X
Carbonyl Chloride (Phosgene)	Gas/Liquid	1	X	X	X	X	X	X	X	X	1	1	X	-	2	-	-	-	-	-	-
Casein (White amorphous solid)	In Concentrated Acid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-
Castor Oil	Pale Yellow or Colorless Liquid	1	1	-	-	-	1	X	X	1	2	1	1	1	-	1	1	1	1	1	1
Caustic Potash, Dry (Potassium Hydroxide)	White Pellets or Flakes	1	1	-	-	2	X	2	1	2	1	1	1	1	X	X	-	-	-	-	-
Caustic Potash, Liquid (up to 45%)	Solution in Water	1	1	1	1	2	2	2	2	-	1	2	-	1	1	1	-	-	-	-	-
Caustic Soda, Dry (Sodium Hydroxide)	White Beads or Pellets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Caustic Soda, Liquid (up to 73%)	Solution in Water	1	2	-	1	2	X	1	1	2	2	X	1	1	2	X	-	-	-	-	-
Cellosolve Acetate (Eg Ethyl Ether Acetate)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	X	-	1	1	1	1	-	1
Cellosolve Butyl (Eg Butyl Ether)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	1
Cellulose	Solid, Many Forms	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																	COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																				
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene			
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	GaIrom™	UHMWPE	SanItron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC									
Cement, Portland	Gray Powder	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China-Wood Oil (Tung Oil)	Yellow Oil	1	2	-	X	X	2	X	X	X	X	1	2	-	-	2	1	1	1	1	1	1	-	-	-
Chlordane	Colorless Viscous Liquid	1	1	-	-	X	X	-	-	X	-	1	X	-	1	2	-	-	-	-	-	-	-	-	-
Chlorinated Napthalene (Chloronapthalene)	Oily Liquid to Solid	1	-	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-	-	-	-
Chlorinated Solvents (ie Tetrachloroethane)	Colorless Liquid	1	X	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-	-	-	-
Chlorine	Gas	NO HOSE AVAILABLE																							
Chlorine Liquid (Liquid @ 210PSIG @ 120°F (38°C))	Clear Amber Liquid	1	-	-	-	X	-	-	-	-	-	1	-	-	X	X	-	-	-	-	-	-	-	-	-
Chlorine Trifluoride	Pale Green Liquid	1	-	-	-	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-	-	-	-
Chlorine Water (.03%/300PPM Chlorine)	Clear, Yellowish Liquid	1	X	1	-	X	-	-	-	-	-	1	-	-	-	-	-	X	X	-	-	1	-	-	-
Chloroacetic Acid (Monochloroacetic Acid)	Powder or White Crystals	1	1	X	X	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-	-	-	-
Chloroacetic Acid (Under 100°F/38°C)	Solid	1	1	1	X	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-	-	-	-
Chloroacetic Acid Solution	In Water, Alcohol, Ether	1	1	X	1	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1	-	-	-
Chloroacetone	Colorless Liquid	-	-	-	-	1	-	-	-	-	-	X	-	X	-	-	-	-	-	-	-	-	-	-	-
Chloroacetyl Chloride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Chloroaniline	Amber Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene (Phenyl Chloride (Monochlorobenzene))	Clear Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	1	1	1	X
Chlorobromomethane	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	-	1	X	-	-
Chlorodifluoromethane (Freon 22)	Gas	SPECIAL HOSE REQUIRED																							
Chloroethane (Ethylene Dichloride)	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	-	-	-
Chloroform	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	X	X	2	X	1	1	1	1	1	1	X	-	-
Chloronapthalene (Chlorinated Napthalene)	Oily Liquid to Solid	1	-	-	-	X	X	X	X	X	X	1	X	X	-	-	-	-	-	-	-	-	-	-	-
Chloropentane (n-amyl chloride)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	1	1	-	-	-	-	X	
Chlorophenol	In Benzene, Alcohol, Ether	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloropicrin Mixture	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
Chloropropylene Oxide (Epichlorohydrin)	Volatile Liquid	1	2	-	X	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	-	-	1	-
Chlorosulfonic Acid	Colorless to Light Yellow Liquid	NO HOSE AVAILABLE																							
Chlorothene (TM for chlorinated solvents)	Colorless Liquid	1	1	X	-	-	X	-	-	X	-	2	-	-	-	-	-	1	1	-	1	-	-	-	-
Chlorotoluene	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	1	X	X	-	X	1	1	1	1	1	1	-	-	-
Clorox	Colorless Liquid	1	2	1	-	-	-	2	2	2	2	-	2	1	1	1	-	2	1	-	-	-	-	X	-
Chocolate Syrup	Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
Chrome Alum (Chromium Potassium Sulfate)	In Water	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-	-	-	1
Chromic Acid (100%)	Dark Red Crystals	1	X	2	-	-	-	-	-	-	-	-	1	-	-	-	X	X	X	X	X	X	-	-	-
Chromic Acid (25% Solution or less)	In Water	1	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	X	2	X	X	1	-	-
Chromic Acid (50% Solution with water)	In Water	1	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	2	X	X	1	-	-	-
Chromic Acid (Chromium Trioxide)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1	-	-	-
Chromic Chloride	In Water	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Chromium Trioxide (Chromic Acid)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1	-	-	-
Cider	Liquid	1	-	-	1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Cinene (Dipentene)	Colorless Liquid	1	2	-	X	X	X	X	X	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Citgo FR Fuels	Liquid	1	1	-	-	1	X	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Citric Acid Solution	In Water	1	1	1	1	1	X	2	2	1	2	1	1	-	1	1	X	X	1	1	X	2	-	-	-
Coal Gas (Coke Oven Gas, Max 120°F/49°C)	Gas	1	-	-	X	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
Coal Tar	Black, Viscous Liquid	1	-	-	X	X	2	X	X	2	X	1	X	2	X	X	1	1	1	1	1	1	-	-	-
Coal Tar Pitch (Roofing)	Liquid above 212°F (100°C)	1	-	-	X	X	2	X	X	2	X	1	2	2	-	X	-	-	-	-	-	-	-	-	-
Cobalt Nickel Plating Solution	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	2	-	-	-	-	-	-
Cocoa Butter (Theobroma Oil)	Liquid above 95°F (35°C)	1	2	2	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Coconut Oil	Liquid above 77°F (25°C)	1	-	-	X	2	1	X	X	1	2	1	2	-	1	2	-	-	-	-	-	-	-	-	-
Cod Liver Oil	Pale Yellow Liquid	1	1	-	2	2	X	X	X	X	2	1	X	-	-	-	1	1	1	1	1	1	-	-	-

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
CHEMICAL	FORM (at room temperature unless otherwise stated)	T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		FEP	GaItron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Coke Oven Gas (Under 300°F/149°C)	Gas	1	1	-	X	X	X	X	X	X	X	1	2	-	-	-	1	1	1	2	-	1
Copper Arsenate (Cupric Arsenate)	In Dilute Acid	1	1	-	-	-	-	2	2	-	-	1	2	-	-	-	1	1	1	-	-	-
Copper Chloride (Cupric Chloride)	In Water	1	1	-	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Copper Cyanide (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Copper Nitrate (Cupric Nitrate)	In Water	1	1	-	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Copper Sulfate (Cupric Sulfate)	In Water	1	1	-	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Copper Sulfide (Soluble in Nitric Acid)	In Nitric Acid	1	-	-	-	-	1	-	X	-	1	1	1	-	-	-	-	-	-	-	-	-
Corn Oil	Pale Yellow Liquid	1	2	-	2	2	2	X	X	2	2	1	X	2	-	1	1	1	1	1	1	X
Corn Syrup (Glucose Syrup)	Clear Liquid	1	2	-	1	2	2	2	2	2	2	2	2	-	-	-	1	1	1	1	-	-
Cottonseed Oil	Liquid, Several Colors	1	1	-	2	2	2	-	-	1	-	1	2	2	-	-	1	1	1	1	1	1
Creosote (high Naphthalene/Anthracene)	Liquid	X	2	X	X	-	2	X	X	X	2	1	X	-	-	X	2	1	1	1	X	2
Cresol (Methyl Phenol)	Liquid above 95°F (35°C)	1	2	-	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-	2
Cresylic Acid	Liquid	1	-	-	-	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-	-
Crotonic Acid (Methylacrylic Acid)	White Crystalline Solid	1	1	1	1	2	2	X	X	-	1	1	-	1	X	-	1	X	-	-	-	-
Crude Oil (Crude Petroleum Oil)	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	2	-	1	1	1	1	1	1	1
Crude Wax	Liquid above 200°F (93°C)	1	2	-	-	-	2	-	-	-	2	1	-	-	-	1	1	1	1	-	1	1
Cryolite (Greenland Spar)	In Sulfuric Acid	1	2	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	X	
Cumene (Isopropyl Benzene)	Colorless Liquid	1	2	-	X	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-
Cupric Arsenate (Copper Arsenate)	In Dilute Acid	1	1	-	-	-	2	2	-	-	1	2	-	-	-	-	1	1	1	-	-	-
Cupric Chloride (Copper Chloride)	In Water	1	1	-	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Cupric Cyanide (Copper Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cupric Nitrate (Copper Nitrate)	In Water	1	1	-	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Cupric Sulfate (Copper Sulfate)	In Water	1	1	-	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Cutting Oil (Mineral Oil Base)	Liquid	1	2	-	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	X
Cutting Oil, Sulfur Base	Liquid	2	-	-	-	-	1	-	X	-	-	-	-	-	-	-	1	1	1	-	1	1
Cutting Oil, Water Soluble	Liquid	1	-	-	-	-	1	-	-	X	-	-	-	-	-	-	1	1	1	-	1	1
Cyanide, Copper (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cyanide, Mercuric	In Water	1	1	-	-	2	2	2	2	1	2	-	1	-	-	-	-	-	X	-	1	
Cyanide, Potassium	In Water	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Cyanide, Silver	In Nitric Acid	1	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1
Cyanide, Sodium	In Water	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-
Cyclohexane	Colorless Liquid	1	2	1	-	X	2	X	X	X	X	1	X	1	1	X	1	1	1	-	1	X
Cyclohexanol	Colorless, Oily Liquid	1	2	-	-	X	2	X	X	2	X	1	2	1	-	X	-	-	-	-	-	1
Cyclohexanone	Colorless to Yellow Liquid	1	1	-	-	X	X	X	X	X	X	X	X	1	X	-	1	1	2	-	X	
Cyclohexylamine	Colorless Liquid	-	-	-	-	1	-	X	-	-	1	X	-	-	-	-	-	-	-	-	-	-
Cyclopentane	Colorless Liquid	1	-	-	-	X	2	-	X	2	X	1	X	2	-	-	-	-	-	-	-	-
Cyclopentanol	Colorless Liquid	1	-	-	-	-	2	-	X	-	X	2	X	1	-	-	-	-	-	-	-	-
Cyclopentanone	Water White Liquid	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-
Cymene	Colorless Liquids	1	2	-	-	X	X	X	X	X	X	2	X	2	-	X	1	1	1	1	1	-
Cymene (Isopropyltoluene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	1	1	1	-
D																						
Decalin (TM for decahydronaphthalene)	Colorless Liquid	1	2	2	X	X	2	X	X	-	X	1	X	2	1	-	-	-	-	-	1	1
Decanal (Decyl Aldehyde)	Colorless to Yellow Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-
Decanol (Decyl Alcohol)	Colorless, Water White Liquid	1	-	-	-	-	1	-	X	X	X	2	2	1	-	X	-	-	-	-	-	-
Decyl Aldehyde (n-decanal)	Colorless to Yellow Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-
Deicing Fluid (ethylene or propylene glycol)	Orange Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	1
Denatured Alcohol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Detergent Sol. (Sodium dodecylbenzenesulfonate)	In Water	1	2	1	1	1	1	X	X	2	1	-	1	-	-	1	2	1	1	1	1	1

CHEMICAL		GATES HOSE / POLYMERS																	COUPLINGS / ADAPTERS				
		FORM (at room temperature unless otherwise stated)																					
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com																							
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data																							
NOTE: Ratings are for the effect on the polymer only!																							
CHEM MASTER™ XTREME™ FEP																							
CHEM MASTER™ PLUS XLPE																							
CHEM MASTER™ PLUS UHMWPE																							
FOOD & BEVERAGE MASTER																							
Gatron™																							
UHMWPE																							
Santron™																							
EPDM																							
NBR																							
SBR																							
NR																							
Chloroprene																							
Butyl																							
Fluorocarbon																							
Hypalon®																							
CPE																							
Nylon																							
PVC																							
Iron/Carbon Steel																							
Stainless Steel 304																							
Stainless Steel 316																							
Aluminum																							
Brass																							
Polypropylene																							
Developing Solutions (Hypos)		Liquid																					
Dextron		Brown Liquid																					
Dextrin (Starch gum)		Yellow or White Powder																					
Diacetone		Colorless Liquid																					
Diacetone Alcohol		Colorless Liquid																					
Diammonium Phosphate		In Water																					
Diazinon		In Petroleum Solvents																					
Dibenzyl Ether		Colorless Liquid																					
Dibutyl Ether		Colorless Liquid																					
Dibutyl Phthalate		Colorless Oily Liquid																					
Dibutylamine		Colorless Liquid																					
Dibutylsebacate		Clear Colorless Liquid																					
Dichloroacetic Acid		Colorless Liquid																					
Dichloroaniline		In Alcohol or Benzene																					
Dichlorobenzene (ortho)		Colorless Liquid																					
Dichlorobenzene (para)		White Crystals																					
Dichlorobenzyl Chloride		Colorless Liquid																					
Dichlorodifluoromethane (Freon 12)		Gas, Liquid-140PSIG @ 100°F (38°C)																	SPECIAL HOSE REQUIRED				
Dichloroethane (Ethylene Dichloride)		Colorless Oily Liquid																					
Dichloroethyl Ether		Colorless Liquid																					
Dichloroethylene		Colorless Liquid																					
Dichloroethylene (Acetylene Dichloride)		Colorless Liquid																					
Dichloromethane (Methylene Chloride)		Colorless Liquid																					
Dichloropentane		Light Yellow Liquid																					
Dichloropropane (Propylene Dichloride)		Colorless Liquid																					
Dicyclohexylamine		Colorless Liquid																					
DIDA (Diisodecyl Adipate)		Light Colored Oily Liquid																					
Diesel Fuel		Liquid																					
Diethanolamine (20%)		In Water or Alcohol																					
Diethanolamine		Liquid above 83°F (29°C)																					
Diethyl Ether (Ethyl Ether)		Colorless Liquid																					
Diethyl Ketone		Colorless Liquid																					
Diethyl Oxalate		Colorless Oily Liquid																					
Diethyl Phthalate (Ethyl Phthalate)		Water White Liquid																					
Diethyl Sebacate		-																					
Diethyl Sulfate		Colorless Liquid																					
Diethyl Sulfide (Ethyl Sulfide)		Colorless Oily Liquid																					
Diethylacetaldehyde (Ethylbutylaldehyde)		Colorless Liquid																					
Diethylamine		Colorless Liquid																					
Diethylbenzene		Colorless Liquid																					
Diethylene Dioxide (1,4 Dioxane)		Colorless Liquid																					
Diethylene Ether (Dioxane)		Colorless Liquid																					
Diethylene Glycol (Dihydroxydiethyl Ether)		Colorless Syrupy Liquid																					
Diethylene Glycol Methyl Ether (Methyl Cellosolve)		Colorless Liquid																					
Diethylene Glycol Monobutyl Ether		Colorless Liquid																					
Diethylene Glycol Monobutyl Ether Acetate		Colorless Liquid																					
Diethylene Glycol Monoethyl Ether		Colorless Liquid																					
Diethylene Glycol Monomethyl Ether		Colorless Liquid																					

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Diethylene Glycol Monomethyl Ether Acetate	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diethylenetriamine	Yellow Liquid	1	1	1	-	1	-	X	-	X	1	X	X	-	-	-	-	-	-	-	-	
Dihydroxyacetone	In Water	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dihydroxydiethyl ether (Diethylene glycol)	Colorless Syrupy Liquid	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	
Diisobutyl Ketone	Colorless Liquid	1	1	-	1	1	X	X	X	X	2	X	X	2	1	-	-	1	1	-	1	1
Diisobutyl Phenol (Octyl Phenol)	White Flakes	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
Diisobutyl Phthalate	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diisobutylene	Colorless Liquids	1	1	-	X	X	2	X	X	X	X	1	X	2	-	-	-	1	1	-	1	-
Diisodecyl Adipate (DIDA)	Light Colored Oily Liquid	1	-	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	
Diisooctyl Phthalate (DIOP)	Nearly Colorless Liquid	1	-	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	
Diisopropanolamine	Liquid above 108°F (42°C)	1	-	-	-	-	2	-	2	-	1	-	-	-	-	-	-	-	-	-	-	
Diisopropyl Ketone	Colorless Liquid	1	1	-	1	1	X	X	X	X	2	X	X	-	1	-	-	1	1	-	1	-
Diisopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diisopropylbenzene (meta)	Colorless Liquid	1	2	2	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Diisopropylidene Acetone (Phorone)	Yellow Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-
Dilauryl Ether	Liquid above 92°F (33°C)	1	1	-	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	
Dimethyl Acetamide (DMAC)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dimethyl Aniline	Yellow/Brown Oily Liquid	1	1	-	-	X	X	X	X	X	2	1	X	2	-	-	-	-	-	-	1	-
Dimethyl Ether	Liquid under Pressure	1	1	1	1	1	X	X	X	X	2	X	X	-	-	-	1	1	1	1	1	-
Dimethyl Formamide	Water White Liquid	1	1	-	1	2	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethyl Phthalate	Colorless Oily Liquid	1	1	-	1	2	X	X	X	X	2	1	X	1	-	-	-	-	-	-	1	-
Dimethyl Sulfate (Methyl Sulfate)	Colorless Liquid	1	1	-	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-	-
Dimethyl Sulfide	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Sulfoxide	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Terephthalate	Colorless Crystals	-	-	-	-	X	X	-	X	X	1	-	-	-	-	-	-	-	-	-	-	-
Dimethylamine (DMA)	Liquid @ 70PSIG @ 120°F (49°C)	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminoethanol (Dimethylethanolamine)	Colorless Liquid	1	1	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminomethyl Phenol (DMP)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethylbenzene (DMB)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Dimethylcarbinol (isopropyl alcohol)	Colorless Liquid	1	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Dimethylcyclohexylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylformamide (DMF)	Water White Liquid	1	2	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethylketone (Acetone)	Colorless Liquid	1	1	X	1	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2
Dimethylphenol (Xylenol)	White Solid, Liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrobenzene (Soluble in Chloroform)	In Chloroform	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, Solid	In Alcohol or Ether	1	1	1	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Diocetyl Adipate di (2-ethylhexyl) adipate	Light Colored Oily Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diocetyl Phosphite, di-(2-ethylhexyl) phosphite	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Diocetyl Phthalate, di-(2-ethylhexyl) phthalate	Light Colored Liquid	1	1	-	1	X	X	X	X	X	X	1	X	2	-	-	1	1	1	1	1	X
Diocetyl Sebacate, di-(2-ethylhexyl) sebacate	Pale Straw Colored Liquid	1	1	-	1	-	X	X	X	X	2	1	X	X	-	-	-	-	-	-	-	-
Diocetylamine di-(2-ethylhexyl)amine	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIOP (Diisooctyl Phthalate)	Nearly Colorless Liquid	1	-	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Dioxane (Diethylene Dioxide)	Colorless Liquid	1	1	-	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxane (Diethylene Ether)	Colorless Liquid	1	1	-	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxolane (Ethylene Glycol Formal)	Water White Liquid	1	-	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	1	1	-
Dipentene (Cinene, Limonene)	Colorless Liquid	1	2	-	X	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Diphenyl Phthalate	Yellow White Powder	1	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																			
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene		
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gafron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC								
Dipropyl Ketone	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-		
Dipropylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dipropylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Dipropylene Glycol Monomethyl Ether (DPM)	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dirco Oils	Liquid	1	1	-	-	X	1	-	-	-	-	X	-	-	1	-	1	1	1	1	1	1		
Disodium Phosphate (DSP soluble in H2O)	Colorless or White Powder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Disodium Phosphate Solution	In Water	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Distillate Fuel Oil	Clear to Brown Liquid	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Divinylbenzene (20-25% or 50-60% Grades)	Water White to Straw Liquid	1	2	-	X	X	X	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-		
DMA (Dimethylamine)	Gas	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
DMAC (Dimethyl Acetamide)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
DMB (Dimethylbenzene)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-		
DMF (Dimethylformamide)	Water White Liquid	1	2	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1		
DMP (Dimethylaminomethyl phenol)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Dodecylbenzene (Detergent Alkylate)	Liquid	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Dodecylphenol	Straw Colored Liquid	1	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Dolomite	Gray, Pink or White Powder	-	-	-	-	2	1	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-		
Dowtherm A (Biphenyl and Biphenyl Ether Mix.)	Liquid	1	1	-	1	1	X	X	X	X	X	1	X	X	-	X	1	1	1	1	1	1		
Dowtherm SR-1 (Ethylene Glycol)	Liquid	1	1	1	1	1	1	-	-	-	1	1	-	1	-	-	2	1	1	1	1	1		
DPM (Dipropylene Glycol Monomethyl Ether)	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Duro Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	1		
E																								
EDB (Ethylene Dibromide)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-		
EDTA (Ethylenediaminetetraacetic Acid)	Colorless Crystals	1	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Emulsion (Oil in Water)	Water is Continuous Phase	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Enamels	Liquid	1	1	-	X	X	-	-	-	-	-	1	-	-	1	2	-	-	-	-	1	-		
Epichlorohydrin (Chloropropylene Oxide)	Volatile Liquid	1	2	-	X	X	-	-	-	-	X	-	-	-	-	-	1	-	-	-	-	1		
Epoxy Resin	Solid Pellet	-	-	-	-	1	-	-	-	1	2	X	-	-	-	-	-	-	-	-	-	-		
Essential Oils	Liquid	1	2	-	X	X	1	X	X	2	-	1	-	-	-	2	1	1	1	1	1	1		
Ethanol (Ethyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1		
Ethanolamine (Aminoethanol)	Colorless Viscous Liquid	1	2	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	1	-	1	-		
Ethers	Liquids	1	1	1	1	1	2	X	X	X	2	X	2	1	-	2	1	1	1	1	1	2		
Ethyl Acetate (Acetic Ether)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	2		
Ethyl Acetoacetate	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	1	-	-	1	1	1	1	1	X		
Ethyl Acrylate	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X		
Ethyl Acrylate, Inhibited	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X		
Ethyl Alcohol (Ethanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1		
Ethyl Aluminum Dichloride (Above 90°F/32°C)	Clear Yellow Liquid	1	-	-	-	X	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-		
Ethyl Bromide	Colorless Liquid	1	2	-	-	X	X	X	X	X	X	1	X	2	1	X	-	1	1	-	1	-		
Ethyl Butyl Ether (Butyl Ethyl Ether)	Liquid	1	-	-	-	-	2	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-		
Ethyl Butyrate	Colorless Liquid	1	1	-	-	-	X	X	X	X	2	-	-	-	-	-	-	1	1	1	-	-		
Ethyl Chloride	Compressed Liquid	1	2	2	-	X	X	X	X	X	1	X	X	-	X	2	1	1	1	1	2	X		
Ethyl Chloroformate (Ethyl Chlorocarbonate)	Water White Liquid	1	-	-	-	X	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-		
Ethyl Ether (Diethyl Ether)	Colorless Liquid	1	2	X	1	X	X	X	X	X	2	X	X	1	2	X	2	1	1	1	1	1		
Ethyl Ether Acetate (Cellosolve Acetate)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1		
Ethyl Formate	Water White Liquid	1	-	-	-	2	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-		
Ethyl Iodide	Colorless Liquid	1	-	-	-	X	X	-	X	X	2	X	X	-	-	-	-	-	-	-	-	-		
Ethyl Isobutyrate	Colorless Liquid	1	-	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-		

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaform™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Ethyl Mercaptan (Ethanethiol)	Colorless Pungent Liquid	1	1	-	-	X	X	X	X	X	X	1	X	-	-	X	2	-	-	-	-	
Ethyl Methyl Ketone (MEK)	Colorless Liquid	1	1	1	1	2	X	-	-	X	-	X	X	2	1	X	-	-	-	-	-	
Ethyl Oleate	Light Yellowish Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethyl Oxalate	Colorless Liquid	1	1	-	-	2	X	2	2	X	2	1	-	1	-	-	-	-	-	-	-	
Ethyl Pentachlorobenzene	-	1	1	-	-	X	X	X	X	X	X	1	X	-	-	-	2	1	1	-	1	
Ethyl Phthalate (Diethyl phthalate)	Water White Liquid	1	1	-	-	X	X	X	-	2	-	-	-	2	-	-	-	1	1	-	1	
Ethyl Propionate	Water White Liquid	1	-	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	
Ethyl Propyl Ketone (3-Hexanone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	
Ethyl Silicate	Colorless Liquid	1	1	-	-	2	1	2	2	1	-	1	-	1	-	-	1	1	1	1	1	
Ethyl Sulfide (Diethyl Sulfide)	Colorless Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Ethylamine	Colorless Liquid or Gas	1	2	-	1	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	
Ethylbenzene	Colorless Liquid	1	2	-	-	X	X	X	X	X	X	1	X	2	-	-	-	1	1	1	-	
Ethylbutanol (2-Ethylbutyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	
Ethylbutyl Alcohol (Ethylbutanol)	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	
Ethylbutyl Amine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylbutyl Ketone	Clear Liquid	1	1	-	-	1	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	
Ethylbutyraldehyde (Diethylacetaldehyde)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylcellulose Granular Solid	Granular Solid	1	1	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	-	1	
Ethylene Chlorohydrin	Colorless Liquid	1	1	-	2	X	X	-	-	X	2	1	-	-	X	X	-	-	-	-	-	
Ethylene Cyanohydrin	Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Dibromide (EDB)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	
Ethylene Dichloride (Chloroethane)	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	2	X	X	X	X	-	-	-	-	-	
Ethylene Glycol	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	
Ethylene Glycol Formal (Dioxolane)	Water White Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	-	1	1	1	1	1	
Ethylene Glycol Monoethylether	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Glycol Monoethylether Acetate	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	1	2	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Glycol N-Butyl Ether	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylenediamine	Colorless Liquid	1	2	-	-	2	1	-	-	-	2	X	-	-	-	-	1	1	-	-	1	
Ethylenediaminetetraacetic acid (EDTA)	Colorless Crystals	1	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Ethylhexaldehyde	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylhexanediol	Colorless Liquid	1	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylhexanol (2-ethylhexyl alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	
Ethylhexoic Acid	Liquid	1	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylhexyl Acetate	Water White Liquid	1	1	-	-	1	X	-	-	X	-	X	X	-	1	-	-	-	-	-	-	
Ethylhexyl Acrylate	Liquid	1	2	-	2	-	X	-	-	-	X	-	-	-	X	-	-	-	-	-	-	
Ethylhexyl Alcohol (Ethylhexanol)	Colorless Liquid	1	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	
F																						
Fatty Acid	Solid, Semisolid or Liquid	1	2	2	2	2	2	X	X	2	2	2	X	2	-	2	2	1	1	1	2	1
Fatty Alcohol, Blend	C8-11 Liquids, > C11 Solids	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	-	-	-	-	-	
Fatty Petroleum Alcohol	C11 or less are Liquids	1	1	1	1	1	1	-	-	-	1	1	-	1	1	-	-	-	-	-	-	
Ferric Bromide	Red Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferric Chloride	Black-Brown Solid	1	1	-	-	2	-	1	2	1	1	1	1	1	1	X	X	X	X	X	1	
Ferric Chloride Solution	Liquid	1	1	-	-	2	-	1	2	1	1	2	1	1	1	X	X	X	X	X	1	
Ferric Nitrate	Violet Crystals	1	1	-	-	-	2	1	2	2	-	2	1	-	X	X	1	1	-	-	1	
Ferric Nitrate Solution	Liquid	1	-	-	-	1	1	-	1	1	1	1	1	-	1	-	X	1	1	-	1	
Ferric Sulfate	Yellow Crystals or Gray Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	1	X	X	1	
Ferric Sulfate Solution	Liquid	1	1	1	-	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	1	

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																			
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene		
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	GaIrom™	UHMWPE	SanItron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC								
Ferrous Acetate Solution	Liquid in H2O or Alcohol	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Ferrous Chloride	Greenish-White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	2	-	2	1		
Ferrous Chloride, Solution	Liquid	1	1	-	-	-	-	-	-	1	1	2	1	-	1	X	1	2	-	2	1			
Ferrous Nitrate	-	1	1	-	2	2	-	-	2	2	-	2	-	2	-	2	-	1	1	-	-	1		
Ferrous Sulfate Solution	Liquid	1	1	1	-	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1		
Fertilizer (Liquid Manure)	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	1	1		
Finishing Oil	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fire-Resistant Hydra-Fluid (Texaco)	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-		
Firtec 290, MF	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fish Oil	Liquid	1	-	1	X	X	1	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-		
Fixing Solution (Photo)	Liquid	1	1	-	-	-	2	2	2	2	-	2	-	1	1	-	1	1	-	-	1			
Flint	Gray, Brownish, Black	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Floor Wax (Temperature Dependent)	Varies	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fluoboric Acid (48% Purity)	Colorless Liquid	1	1	1	1	2	-	2	2	2	-	2	1	-	X	-	1	1	-	-	1			
Fluoboric Acid (up to 48%)	Colorless Liquid	1	1	-	-	1	-	2	2	2	-	1	2	1	-	X	-	1	1	-	-	1		
Fluorine	Pale Yellow Gas	NO HOSE AVAILABLE																-	-	-	-	-	-	
Fluorine (Liquid)	Yellow Liquid	NO HOSE AVAILABLE																-	-	-	-	-	-	
Fluosilicic Acid (50%)	Colorless Liquid	1	1	1	1	2	X	-	-	2	X	-	2	1	X	X	X	-	-	-	1	-	1	
Formaldehyde	Gas	-	1	-	-	1	-	-	-	-	-	1	-	-	1	-	X	2	1	2	1	-		
Formaldehyde Solution (up to 50%)	Liquid	1	2	1	1	1	2	X	X	2	2	1	2	1	1	1	X	2	1	2	1	-		
Formalin (37-50% HCHO with 15% MeOH)	Liquid	1	1	-	1	1	2	X	X	2	2	1	2	1	1	1	-	-	-	-	-	-		
Formamide	Colorless Oily Liquid	1	1	-	-	-	-	X	X	-	-	-	-	-	X	-	-	-	-	-	-	-		
Formic Acid	Colorless Liquid (bp 100 °C)	1	1	1	1	2	-	X	X	1	2	X	2	1	X	X	X	2	1	-	2	1		
FR Fluid D	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-		
FR Hydraulic Fluid	Brown Liquid	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Freon 12 (Dichlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED																-	-	-	-	-	-	
Freon 13	Gas or Liquid	SPECIAL HOSE REQUIRED																-	-	-	-	-	-	
Freon 134a (HFC 134a)	Gas or Liquid	SPECIAL HOSE REQUIRED																-	-	-	-	-	-	
Freon 22 (Chlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED																-	-	-	-	-	-	
Freon 23	Clear Liquid	SPECIAL HOSE REQUIRED																-	-	-	-	-	-	
Fruit Juices	Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-		
Fuel Oil (ASTM 1-6)	Water White to Brown Liquids	1	2	1	X	X	1	X	X	2	X	1	X	1	1	X	2	2	2	1	1	-		
Fumaric Acid	Colorless Crystals	1	1	1	1	2	-	2	2	-	1	-	-	-	X	-	1	1	-	-	-	-		
Fumaric Acid Solution (Allomalic Acid)	Liquid	1	1	-	-	2	1	2	2	-	1	-	-	-	X	-	1	1	-	-	-	-		
Furan (Furfuran)	Colorless to Brown Liquid	1	1	1	-	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	1		
Furfural (Ant Oil)	Colorless to Reddish Brown Liquid	1	1	-	2	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2		
Furfural Alcohol	Colorless to Brown Liquid	1	1	2	2	X	X	X	X	2	X	1	2	1	1	X	2	1	1	1	1	2		
Furfuran (Furan)	Colorless to Brown Liquid	1	1	1	-	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	1		
Furfuryl Alcohol	Colorless to Reddish Brown Liquid	1	1	-	2	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-		
Fusel Oil (Amyl Alcohol, Grain Oil)	Colorless Liquid	1	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	-		
Fyrguard 150, 200	-	1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-		
Fyrquel 15R&O, 220R&O, 550R&O	-	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-		
Fyrquel 90, 150, 220, 300, 550, 1000	-	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-		
G																								
Gallic Acid (3,4,5 Trihydroxybenzoic Acid)	In Alcohol or Glycerol	1	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	X	1	1	-	-	1	
Gallic Acid Solution	In Alcohol Solution	1	1	-	1	-	X	2	2	X	2	1	-	1	X	X	X	X	1	1	-	-	1	
Gasohol (Gasoline blended with Ethanol) ¹	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X		
Gasoline (Oxygenated-Blended With MTBE) ¹	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X		

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Gasoline (Unleaded Up to 50% Aromatics) ¹	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	1	1	X	2	1	1	1	1	-
Gasoline (White) ¹	Colorless Liquid	1	2	-	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	-
¹ Only use fuel rated hose, except for transfer																						
Gelatin	Flakes or Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-
Glacial Acetic Acid	Clear Colorless Liquid	1	1	1	X	2	-	-	-	X	X	X	-	X	X	X	-	-	-	-	-	-
Glacial Methacrylic Acid (GMAA)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glauber's Salt (Sodium Sulfate Decahydrate)	Crystals or Powder	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Gluconic Acid (Commercial 50% Aqueous)	Aqueous Solution	1	-	-	-	-	X	-	X	-	X	-	2	1	-	-	-	-	-	-	-	-
Glucose	Crystals to White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Glucose Solution	Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1
Glue	Varies	1	1	-	-	X	2	X	X	2	X	1	1	-	2	1	2	1	1	1	1	X
Glycerine (Glycerol)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	1	-
Glycerol (Glycerine)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	1	-
Glycerol Monolaurate	Liquid above 80°F (27°C)	1	1	1	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Glycol FR Fluids	Liquid	1	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Glycol Slurry	Watery Suspension	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycols (ie Ethylene Glycol)	Clear Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
GMAA (Glacial Methacrylic Acid)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite	Powdered, Flake, Crystals	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Grease	Semi-Solid	1	1	2	2	X	1	X	X	2	X	1	2	-	-	1	1	1	1	1	1	-
Grease, Silicone Base	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	1	-
Green Liquor (Effluent Alkaline Pulping)	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Green Sulfate Liquor	Liquid	1	1	1	-	1	2	1	1	1	1	-	1	2	-	-	1	1	1	1	1	-
H																						
Halowax (Chlorinated Hydrocarbons)	Oils to Waxy Solid	1	1	1	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
HEA (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
HEA Acid (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hematite (Iron Ore)	Black to Brick Red	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
HEP (2-Hydroxypropyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Heptachlor (In Xylene)	Liquid	1	2	-	X	X	2	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Heptanal (Heptaldehyde)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptane	Colorless Liquid	1	2	1	X	X	1	X	X	2	X	1	X	1	1	2	1	1	1	1	1	-
Heptanedicarboxylic Acid (Azelaic Acid)	Yellowish to White Powder	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptanoic Acid	Clear Oily Liquid	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Heptanol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	X	1	1	-	-	-	-	-	-
Hexachlorocyclohexane	White to Yellowish Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	Yellow Liquid	1	-	-	X	X	-	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid (Palmitic Acid)	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydrophthalic Anhydride	Clear Colorless Viscous Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexaldehyde	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Hexamethylenediamine, Solution	Colorless Flat Solid Leaflets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexamethyleneimine	Clear Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexane	Colorless Liquid	1	X	1	X	X	1	X	X	-	X	1	-	1	1	X	1	1	1	-	1	-
Hexanol (Hexyl Alcohol)	Colorless Liquid	1	1	-	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	2	-
Hexanone (Ethyl Propyl Ketone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Hexene	Colorless Liquid	1	-	-	X	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexyl Cellosolve (EG monohexyl ether)	Water White Liquid	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hexyl Alcohol (Hexanol)	Colorless Liquid	1	1	-	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	2	-
Hexyl Methacrylate	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS					
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)		FEP	GaIrom™	UHMWPE	SanItron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Hexylamine	Water	White Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	
Hexylene (1-Hexene)	Colorless	Liquid	1	-	-	X	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	
Hexylene Glycol	Colorless	Liquid	1	1	1	1	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	
Honey	Yellow	Liquid	1	-	-	-	1	1	-	1	1	-	1	-	-	-	1	-	-	-	-	-	
Houghto-Safe 1055, 1110, 1115, 1120, 1130	Liquid		1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	1	1	1	1	
Houghto-Safe 271, 416, 520 & 616, 620	Liquid		1	1	-	-	-	1	X	-	-	-	1	-	-	-	-	1	1	1	1	1	
Houghto-Safe 5046	Liquid		1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	
Houghto-Safe 625, 640 & 525 (Under 100°F/38°C)	Liquid		1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	
HPA Acid (2-Hydroxypropyl Acrylate)	Liquid		1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	
HPO (Sodium Thiosulfate)	White Powder		1	1	-	-	-	1	1	1	1	1	-	1	1	1	1	X	1	1	2	X	
Hy-Chock Oil	Liquid		1	1	-	-	-	1	-	-	-	-	1	-	-	1	-	1	1	1	-	-	
Hydrocyanic Acid (up to 98%)	Water	White Liquid	1	X	-	-	-	-	-	-	-	-	1	-	-	-	-	X	1	1	1	X	
Hydrafluid 760 (Texaco and Houghton)	Liquid		1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	1	
Hydrafluid AZR&O, A, B, AA, C	Liquid		1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	
Hydrasol A (Textile Dying)	-		1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	
Hydraulic Fluid (Phosphate Ester Base)	Liquid		1	1	-	-	1	X	-	-	X	1	1	-	-	1	1	1	1	1	-	-	
Hydraulic Fluid (Polyalphaolifin)	Liquid		1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	1	1	
Hydraulic Fluid (Std. Petroleum Oils)	Liquid		1	1	-	-	X	1	X	X	2	X	1	2	1	1	1	1	1	1	1	1	
Hydraulic Fluid (Water Glycol Base)	Liquid		1	1	-	-	-	1	2	2	1	1	1	-	-	1	1	1	1	1	1	1	
Hydraulic Fluid HF-18, HF-20	Liquid		1	1	-	-	1	1	-	-	-	1	1	-	-	1	2	1	1	1	1	1	
Hydraulic Fluid HF-31	Liquid		1	1	-	-	X	-	-	-	-	X	-	-	-	1	-	1	1	1	1	1	
Hydrazine	Colorless Fuming	Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	
Hydrazine Hydrate	Colorless Fuming	Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	
Hydrazine Solution	Liquid		1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	
Hydro-Drive Oil (Houghton)	Liquid		1	-	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	
Hydrobromic Acid (62% and less)	Colorless to Yellow	Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	
Hydrobromic Acid (to 48%)	Colorless to Yellow	Liquid	1	1	1	1	1	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	
Hydrochloric Acid (15%)	Colorless to Yellow	Liquid	1	1	1	1	2	X	2	2	X	2	1	2	1	X	X	X	X	X	X	-	
Hydrochloric Acid (37%)	Colorless to Yellow	Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	-	
Hydrochloric Acid, anhydrous	Colorless Fuming	Gas	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	X	X	X	X	-	
Hydrocyanic Acid (10% Solution with water)	Water	White Liquid	1	1	1	-	-	X	2	2	X	-	1	2	X	-	X	X	1	1	1	X	
Hydrocyanic Acid (98% or less)	Water	White Liquid below 77°F (25°C)	1	X	-	-	-	-	-	-	-	-	1	-	X	-	X	-	-	-	-	-	
Hydrocyanic Acid (up to 20%)	Water	White Liquid	1	1	-	-	1	2	2	2	2	-	1	1	X	-	2	-	-	-	-	-	
Hydrofluoric Acid (38% or less)	Colorless	Liquid	1	1	1	1	2	X	X	X	2	2	1	1	1	X	X	X	X	X	X	-	
Hydrofluoric Acid (47% or less)	Colorless	Liquid	1	1	1	1	2	X	X	X	2	2	1	2	1	X	X	X	X	X	X	-	
Hydrofluoric Acid (53% or less)	Colorless	Liquid	1	1	X	1	-	X	X	X	2	X	1	2	1	X	X	X	X	X	X	-	
Hydrofluoric Acid (70%)	Colorless	Liquid	1	1	X	1	X	X	X	X	X	-	1	2	1	X	X	X	X	X	X	-	
Hydrofluoric Acid (Concentrated)	Colorless	Liquid	1	1	X	2	X	X	X	X	X	2	2	1	X	X	X	X	X	X	X	-	
Hydrofluosilicic Acid	In Water		1	1	1	2	2	X	X	X	X	1	1	X	X	X	X	X	X	X	-	1	
Hydrogen (Gas)	Gas		CONTACT DENVER PRODUCT APPLICATION																				
Hydrogen Bromide Liquified (Anhydrous)	Liquid		1	-	-	-	1	X	X	X	-	X	1	-	X	-	-	-	-	-	-	-	
Hydrogen Bromide Solution (Hydrobromic Acid)	Liquid		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydrogen Bromide, Anhydride	Colorless	Gas	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydrogen Chloride	Colorless Fuming	Gas	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	
Hydrogen Dioxide (Hydrogen Peroxide)	Liquid		1	-	-	-	2	X	-	-	2	-	1	1	-	-	-	-	-	-	-	-	
Hydrogen Fluoride	Colorless Gas or Liquid		1	-	-	-	1	X	X	X	-	2	X	-	-	-	-	1	1	1	-	-	
Hydrogen Peroxide (35% or less)	Liquid		1	1	1	X	1	2	X	X	1	X	1	1	X	1	1	X	2	1	1	X	
Hydrogen Peroxide (50% or less)	Liquid		1	2	1	X	1	2	X	X	1	X	1	1	X	2	2	X	2	1	1	X	

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Hydrogen Peroxide (70% or less)	Liquid	1	2	1	X	2	X	X	X	2	-	1	1	X	X	2	X	2	1	1	X	-
Hydrogen Peroxide (90% or less)	Liquid	1	-	1	-	2	X	X	X	2	-	1	1	X	X	X	X	2	1	1	X	-
Hydrogen Sulfide	Colorless Gas	NO HOSE AVAILABLE															-	-	-	-	-	-
Hydrogen Sulfide, Liquefied	Liquid @ 410 PSI, 120°F (49°C)	1	-	-	-	1	X	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-
Hydrolube (Water Glycol)	Liquid	1	-	1	-	1	1	-	-	2	1	-	-	-	1	-	-	-	-	-	-	-
Hydrolubric Oil (Houghton)	Liquid	1	1	-	-	X	2	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-
Hydroquinone	White Crystals	1	1	-	-	X	-	X	X	X	2	X	-	-	-	-	-	1	1	-	-	-
Hydroquinone Solution	Liquid	1	-	-	-	X	X	-	X	X	1	-	-	-	2	-	1	1	-	-	-	-
Hydroxyacetic Acid	Colorless Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroxyacetic Acid Solution	Liquid	1	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate (HEA)	Liquid	1	1	1	1	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate Acid (HEA Acid)	Liquid	1	1	1	1	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate	Clear Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate Solution in Xylene	Clear Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Hydroxypropyl Acrylate Acid (HPA Acid)	Liquid	1	1	1	1	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
Hylene (Toluene Diisocyanate)	Yellow Liquid	1	-	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Hypochlorous Acid (only in dilute solutions)	Greenish-Yellow Aqueous Sol.	1	1	1	1	2	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
I																						
Ink (Printers)	Liquid	1	1	-	-	X	2	X	X	-	X	X	-	-	1	-	2	2	1	-	2	-
Ink Oil	Liquid	1	2	-	-	-	2	-	-	-	-	-	-	-	-	-	1	1	1	-	1	-
Insulating Oil (Transformer) ¹ ¹ Petroleum hose only	Liquid	1	1	-	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	-
Iodine	Grayish Black Granules	1	-	-	-	-	-	1	X	-	-	-	-	-	-	X	X	X	X	-	-	-
Iodine Solution	Liquid	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Iodine, In Alcohol	Liquid	1	1	1	1	1	-	X	X	2	-	1	-	1	-	1	-	-	-	-	-	-
Iron Acetate Liquor (Black Liquor)	Black Liquid	1	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Iron Hydroxide	Brown Precipitate	1	-	-	-	1	1	-	X	1	1	1	1	-	-	-	-	-	-	-	-	-
Iron Ore (Hematite)	Black to Brick Red	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide (Black, Brown, Red or Yellow)	Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide Slurry	Slurry	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Salts	-	1	-	-	-	1	1	-	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Iron Sulfate Solution (Ferric Sulfate)	Liquid	1	1	1	-	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1
Iron Sulfide Solution (Ferrous Sulfide)	Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Isoamyl Acetate	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Alcohol (Isobutyl Carbinol)	Colorless Liquid	1	-	-	-	2	2	-	2	2	2	2	2	1	-	-	-	-	-	-	-	-
Isoamyl Bromide	-	1	-	-	-	X	X	-	X	X	X	2	X	X	-	-	-	-	-	-	-	-
Isoamyl Butyrate	Water White Liquid	1	-	-	-	X	-	X	-	X	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Chloride	Colorless to Yellow Liquid	1	2	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-	-
Isoamyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Phthalate	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	X	-	-	-	-	-	-	-	-	-
Isobutane	Colorless Gas	USE LPG HOSE ONLY															-	-	-	-	-	-
Isobutane Liquid	Liquid @ 98 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Isobutanol (Isobutyl Alcohol)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-
Isobutene (Isobutylene)	Gas	1	-	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-
Isobutyl Acetate	Colorless Liquid	1	-	-	-	X	X	-	X	X	X	X	X	2	-	-	-	-	-	-	-	-
Isobutyl Alcohol (Isobutanol)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-
Isobutyl Aldehyde (Isobutyraldehyde)	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	2	-	-	-	-	-	-	-	-
Isobutyl Carbinol (Primary Isoamyl Alcohol)	Colorless Liquid	1	-	-	-	2	2	-	2	2	2	2	2	-	-	-	-	-	-	-	-	-
Isobutylamine	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS			
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gafron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC					
Isobutylene (Isobutene)	Gas	1	-	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-
Isobutylene Liquid (Isobutene Liquid)	Liquid @ 88 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Isobutyraldehyde (Isobutyl Aldehyde)	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	
Isocyanate (Toluene Diisocyanate)	Water White to Yellow Liquid	1	2	1	X	X	X	X	X	X	X	1	-	-	1	-	1	1	1	-	-
Isooctane	Colorless Liquid	1	2	-	X	X	1	X	X	1	X	1	1	2	1	X	1	1	1	2	1
Isooctyl Adipate	Viscous Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Isooctyl Alcohol	Clear Liquid	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Isooctyl Thioglycolate	Water White Liquid	1	1	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Isopentane	Colorless Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Isophorone	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Isophthaloyl Chloride	Liquid above 106°F (41°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Isopropanol (Isopropyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropanolamine (MIPA)	Liquid	1	2	-	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	
Isopropyl Acetate	Colorless Liquid	1	1	1	1	2	X	X	X	X	2	-	X	-	1	X	1	1	1	1	1
Isopropyl Alcohol (Isopropanol)	Colorless Liquid	1	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2
Isopropyl Benzene (Cumene)	Colorless Liquid	1	2	-	X	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	
Isopropyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	
Isopropyl Ether	Colorless Liquid	1	1	1	-	X	X	X	X	X	2	X	X	X	1	X	1	1	1	1	1
Isopropylamine	Colorless Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Isopropylbenzene (Cumene)	Colorless Liquid	1	2	-	X	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	
Isopropyltoluene (Cymene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	X	1	-	1	1	1	1	1	
J																					
Jet Fuel A and A1 ²	Liquid	1	-	-	-	-	1	-	-	-	-	1	-	X	-	-	-	-	-	-	
Jet Fuel JP1 ²	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	X	1	X	-	-	-	-	
Jet Fuel JP10 (Tetrahydrodicyclopentadiene) ²	Liquid	1	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	
Jet Fuel JP4 ²	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	X	1	X	2	1	1	2	1
Jet Fuel JP5 ²	Liquid	1	1	-	X	X	1	X	X	X	1	X	X	1	X	2	1	1	1	2	1
Jet Fuel JP8 ²	Liquid	1	1	-	X	X	1	X	X	X	1	X	-	1	X	2	1	1	2	1	
² Aircraft fueling hose only for fueling operations.																					
K																					
Kaolin Clay	White to Yellowish Powder	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Karo Syrup	Yellow Liquid	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	1	1	-	-	
Kerosene	Water White Oily Liquid	1	1	-	X	X	1	X	X	X	1	X	1	1	2	1	1	1	1	1	
Ketchup	Red Liquid	-	-	-	1	-	1	-	-	1	-	-	-	1	-	-	1	1	-	-	
Ketoglutaric Acid	In Water or Alcohol	1	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ketones (ie Acetone, MEK, Cyclohexanone)	Generally Liquids	1	1	1	1	2	X	X	X	X	2	X	X	-	1	X	1	1	1	1	
Koch Acid	White Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
L																					
Lacquer - Alcohol or Acetate as Solvent	Solution	1	1	1	1	2	-	-	-	-	X	-	-	-	-	X	X	1	1	1	
Lacquer - Toluene or Xylene as Solvent	Solution	1	-	-	-	-	X	X	X	X	1	X	-	1	X	X	X	1	1	1	
Lactic Acid (90% or less)	Colorless-Yellow Liquid	1	1	1	1	2	X	2	2	1	-	1	1	-	-	X	X	2	1	X	
Lactic Acid, Food-Grade - 50-80%	Colorless to Yellow Liquid	1	1	1	1	2	-	X	X	-	X	1	1	-	-	X	2	1	X	2	
Lactic Acid, Plastic Grade - 50-80% or less	Colorless to Yellow Liquid	1	1	1	1	2	1	-	-	1	-	1	1	-	X	1	X	2	1	X	
Lactic Acid, USP 85-90% or less	Colorless to Yellow Syrupy Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	-	X	2	1	X	2	
Lactol	-	1	1	-	-	-	2	-	-	2	-	-	-	-	-	-	1	1	1	-	
Lard (Fat of the Hog)	Liquid above 108°F (42°C)	1	1	1	X	X	1	X	X	2	X	1	X	1	1	-	1	1	1	1	
Lard Oil	Colorless to Yellow Liquid	1	1	-	-	-	-	-	-	2	-	X	-	-	-	-	1	1	1	1	
Lasso (Alachlor)	Colorless Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	
Latex Paint	Liquid	1	1	1	1	1	1	2	2	-	2	1	-	-	1	1	1	1	1	1	

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
CHEMICAL	FORM (at room temperature unless otherwise stated)	T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Lauryl Peroxide	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauryl Alcohol	Liquid above 75°F (24°C)	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Lead Acetate	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	1	1	-	1	-
Lead Acetate Solution	Solution	1	1	1	1	1	2	2	2	-	2	1	-	1	-	1	2	1	1	-	1	-
Lead Arsenate	White Crystals	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead Arsenate Solution (In Nitric Acid)	Solution	1	1	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-
Lead Nitrate Solution (In Water or Alcohol)	Solution	1	1	1	1	1	1	2	2	2	2	1	-	1	-	1	1	1	1	-	-	-
Lead Silicate (basic)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead Sulphate (Basic, Blue Basic, Tribasic)	White to Blue Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead, Tetraethyl (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Lead, Tetramethyl (Tetramethyl Lead)	Colorless Liquid	1	-	-	-	X	2	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Lecithin	Light Brown Viscous Liquid-Solid	1	1	-	-	-	X	-	-	2	-	-	-	-	-	-	-	1	1	-	-	-
Ligroin	Clear Liquid	1	2	-	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	-	-	-
Lime (Calcium Oxide)	White to Gray Lumpy Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime Sulfur Solution	Solution	1	1	1	1	2	X	X	X	1	X	1	2	-	-	2	2	1	1	X	X	-
Lime, Chlorinated (Bleaching Solution)	Solution	1	1	1	1	2	2	2	2	X	2	1	X	-	-	2	X	2	1	-	-	-
Lime, Chlorinated (normal 35-37% Chlorine)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime, Hydraulic (Calined Limestone)	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lime, Slaked (Calcium Hydroxide)	White Crystalline Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limestone	Powder or Lumps	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limonene	Colorless Liquid	1	2	1	X	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Lindane (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-
Linoleic Acid	Colorless to Straw Colored Liquid	1	1	1	-	X	2	-	-	X	X	1	-	-	-	1	-	-	-	-	-	-
Linseed/Flax Seed	Yellow Amber to Brown Liquid	1	1	X	2	2	2	X	X	2	-	1	1	1	1	1	2	1	1	1	1	2
Liquid Soap	Liquid	1	1	1	-	2	-	2	2	-	2	-	-	-	-	2	1	1	1	1	1	-
Lithium Chloride	White Crystals	-	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium Chloride (35-40% Brine)	Solution	X	1	X	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Lubricating Oil Diester (Under 135°F/57°C)	Liquid	1	1	-	-	X	2	X	X	-	X	1	-	-	-	X	1	1	1	1	1	-
Lubricating Oil (SAE 10, 20, 30, 40, & 50)	Liquid	1	-	-	-	-	2	-	-	2	-	-	-	-	1	-	1	1	1	1	1	-
Lubricating Oil (Under 120°F/49°C)	Liquid	1	1	-	-	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-
M																						
Machine Oil (Under 135°F/57°C)	Liquid	1	1	-	-	X	1	X	X	1	X	1	2	-	1	2	1	1	1	1	1	-
Magnesite	White to Brown Crystalline Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate	Colorless Crystalline Aggregate	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate Solution	In Water or Alcohol	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	-	-	-	-	-	-
Magnesium Carbonate	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Magnesium Carbonate Solution (in Acid)	Liquid Solution	1	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	1	1	-	-	-
Magnesium Chloride	Colorless to White	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	2	-
Magnesium Chloride Brine	Solution	1	1	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Chloride, Hydrated (in H2O or Alcohol)	Solution	1	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Magnesium Hydroxide	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	-	-
Magnesium Hydroxide Solution (in Dilute Acid)	Liquid Solution	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	X	-	-
Magnesium Nitrate	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	1	-
Magnesium Nitrate Solution (in H2O or Alcohol)	Liquid Solution	1	1	1	1	1	1	-	-	-	-	1	-	-	-	-	1	1	1	X	1	-
Magnesium Oxide, Dry	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Oxide, Slurry	-	1	1	-	-	1	2	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Sulfate Solution	Liquid Solution	1	1	1	1	1	1	1	1	2	1	1	1	1	-	1	2	1	1	-	1	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																	COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																				
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene			
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gafron™	UHMWPE	Santron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC									
Malathion (Ag Spray Dilute)	Clear to Amber Liquid	1	1	1	-	2	-	X	X	-	1	1	-	-	1	1	1	1	1	-	1	-			
Malathion (Ag Spray)	Clear to Amber Liquid	1	1	-	-	2	-	-	-	-	1	-	-	-	1	-	1	1	1	-	1	-			
Maleic Acid	Liquid	NO HOSE AVAILABLE																							
Maleic Acid Solution	Solution	1	1	1	1	1	2	2	2	X	-	1	-	-	-	X	2	2	1	-	-	-			
Maleic Anhydride	Colorless Needles	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Maleic Anhydride (Heated Liquid)	Liquid above 124°F (53°C)	1	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Malic Acid (dl form)	Colorless Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Malic Acid Solution (in H2O or Alcohol)	Solution	1	1	1	1	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Malt Extract (Maltine)	Light Brown Viscous Liquid	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Malt, Dry	Yellow to Amber Grain	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Maltine (Malt Extract)	Light Brown Viscous Liquid	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Manganese Salts	-	1	-	-	-	1	X	X	-	-	1	1	-	-	1	-	-	-	-	-	-	-			
Manganese Sulfate (Manganous Sulfate)	Pale Red Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Manganese Sulfate Solution	Solution in Water	1	1	-	-	-	1	2	2	-	-	1	1	1	-	1	-	-	-	-	-	-			
Manganese Sulfide (Manganous Sulfide)	Green Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Manganese Sulfite (Manganous Sulfite)	Black to Brownish Red Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
MAPP Gas (Methylacetylene Propadiene)	Liquid	USE LPG HOSE ONLY																							
Maxmul (Penzoil Hydraulic Fluid)	Liquid	1	-	-	-	-	1	-	-	2	-	-	-	-	-	-	1	-	1	-	-	-			
Mayonnaise	Semi-Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-			
MBK (Methyl Butyl Ketone)	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-			
MEK (Methyl Ethyl Ketone)	Colorless Liquid	1	2	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-			
Mercuric Chloride	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	1	X	X	-			
Mercuric Chloride Solution (in H2O or Alcohol)	Solution	1	1	-	-	2	2	2	1	1	2	-	1	1	-	2	X	1	1	X	X	-			
Mercuric Cyanide	Colorless Transparent Prisms	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	X	-	-			
Mercuric Cyanide Solution (in H2O or Alcohol)	Solution	1	1	-	-	2	2	2	2	1	2	-	1	-	-	-	-	-	-	X	-	-			
Mercurous Nitrate Solution	Solution	1	1	1	-	2	-	-	-	-	1	-	-	-	-	-	1	1	1	X	-	-			
Mercury	Silver Liquid	1	1	1	-	-	2	2	2	1	2	-	1	1	-	1	1	1	1	X	X	-			
Mercury Vapor	Gas	NO HOSE AVAILABLE																							
Mesityl Oxide (Methyl Isobutenyl Ketone)	Colorless Oily Liquid	1	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-			
Mesitylene (Trimethylbenzene)	Liquid	1	-	-	X	X	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-	-			
Metallic Soaps (Aluminum, Calcium, Zinc)	Solids @ Room Temperature	1	1	1	-	X	1	X	X	-	X	1	2	1	-	-	1	1	1	1	1	-			
Methallyl Alcohol (Methylallyl Alcohol)	Colorless Liquid	1	-	-	-	1	-	2	-	2	2	2	2	-	-	-	-	-	-	-	-	-			
Methane	Gas	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Methanol (Methyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	2	-			
Methionine	White Crystalline Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Methoxychlor Solution (in Alcohol)	Solution	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	-	-	-			
Methylamine (Monomethylamine)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	X	1	1	1	1	-	-	-			
Methyl Acetate	Colorless Liquid	1	2	-	-	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	-			
Methyl Acetoacetate	Colorless Liquid	1	-	-	-	2	X	-	X	X	2	X	X	-	-	-	-	-	-	-	-	-			
Methyl Acetone	Water White Liquid	1	-	-	-	1	X	-	X	-	2	X	X	-	-	1	-	-	-	-	-	-			
Methyl Acrylate (Inhibited)	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	X	-	-	-	1	1	1	1	1	-			
Methyl Acrylate Acid (Methylacrylic Acid)	White Solid	1	1	1	1	2	2	X	X	-	1	X	-	1	X	-	-	-	-	-	-	-			
Methyl Alcohol (100%) (Methanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	2	-			
Methyl Bromide	Liquid @ 55 PSIG @ 120°F (49°C)	1	1	-	-	X	X	X	X	X	X	1	X	-	1	X	1	1	1	1	-	1			
Methyl Bromoacetate	Colorless to Straw Colored Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Methyl Butanethiol (Butyl Mercaptan)	Liquid	1	1	-	X	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-	-			
Methyl Butanol (2-Methyl-1-Butanol)	Colorless Liquid	1	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-			
Methyl Butyl Ketone (MBK)	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-			

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS					
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gartron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC							
Methyl Carbitol (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-		
Methyl Cellosolve (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	X	X	1	-	-	-	-	-	-	-		
Methyl Chloride	Liquid @ 160PSIG @ 120°F (49°C)	1	2	-	X	X	X	X	X	X	X	1	X	X	-	X	1	1	1	-	1		
Methyl Chloroform (1,1,1 Trichloroethane)	Colorless Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-		
Methyl Chloroformate	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-		
Methyl Cyanide (Acetonitrile)	Colorless Liquid	1	1	2	1	2	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-		
Methyl Cyclohexane	Colorless Liquid	1	-	-	X	X	1	X	X	-	X	1	X	2	1	-	-	-	-	-	-		
Methyl Ethyl Ketone (MEK)	Colorless Liquid	1	2	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1		
Methyl Formate	Colorless Liquid	1	1	-	-	2	X	X	X	2	2	X	X	-	-	-	1	1	1	1	1		
Methyl Hexanol	-	1	-	-	-	-	1	-	1	-	1	2	1	-	-	-	-	-	-	-	-		
Methyl Hexanone (Methyl Isoamyl Ketone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-		
Methyl Hexyl Ketone	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-		
Methyl Isoamyl Ketone (Methyl Hexanone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-		
Methyl Isobutenyl Ketone (Mesityl Oxide)	Colorless Oily Liquid	1	1	1	-	2	X	X	X	X	2	X	X	X	-	X	1	1	1	1	1		
Methyl Isobutyl Ketone (MIBK)	Colorless Liquid	1	2	-	-	-	X	X	X	X	2	X	X	X	1	X	-	-	-	-	-		
Methyl Isopropyl Ketone	Colorless Liquid	1	2	-	-	2	X	X	X	X	2	X	X	X	1	X	1	1	1	1	1		
Methyl Methacrylate	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	2	2	-	1	1	1	1	-	-		
Methyl Methacrylate Monomer, Inhibited	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-		
Methyl Phenol (Cresol)	Liquid above 95°F (35°C)	1	2	-	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-		
Methyl Propyl Carbinol (2 Pentanol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-		
Methyl Propyl Ether	Colorless Liquid	1	-	-	-	-	X	-	X	-	X	-	2	-	-	-	-	-	-	-	-		
Methyl Propyl Ketone (Pentanone)	Water White Liquid	1	-	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-		
Methyl Salicylate	Yellow to Red Liquid	1	1	-	-	2	2	-	-	2	2	-	-	-	-	1	1	1	1	1	1		
Methyl Stearate	Liquid above 99°F (38°C)	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methyl Sulfate (Dimethyl Sulfate)	Colorless Liquid	1	1	-	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-		
Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methyl-n-Amyl Carbinol	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-		
Methyl-n-Amylketone	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylacetylene Propadiene (MAPP Gas)	Liquid @ 107 PSIG @ 68°F (20°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-		
Methylacrylic Acid (Crotonic Acid)	White Crystalline Solid	1	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-		
Methylal	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-		
Methylallyl Alcohol (Methallyl Alcohol)	Colorless Liquid	1	-	-	-	-	1	-	2	-	2	2	2	-	-	-	-	-	-	-	-		
Methylallyl Chloride	Colorless to Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-		
Methylamine (30-40% in H2O)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-		
Methylamine (Anhydrous)	Liquid @ 120 PSIG @ (120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-		
Methylamyl Acetate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylamyl Alcohol	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-		
Methylaniline	Colorless to Brown Liquid	1	1	1	1	2	X	-	-	X	-	1	2	-	X	X	-	-	-	-	-		
Methyldiethanolamine	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylene Bromide	Clear Liquid	1	-	-	-	-	2	-	-	-	-	1	-	-	-	X	-	-	-	-	-		
Methylene Chloride (70°F)	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylene Chloride (Dichloromethane)	Colorless Liquid	1	1	2	X	X	X	X	X	X	X	2	X	X	X	X	1	1	1	1	1		
Methylene Dichloride	Colorless Liquid	1	1	1	X	X	X	X	X	X	X	1	X	X	X	X	1	1	1	X	1		
Methylene Diphenyl Diisocyanate, MDI	Liquid above 99°F (37°C)	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylstyrene	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-		
MIBK (Methyl Isobutyl Ketone)	Colorless Liquid	1	2	-	-	-	X	X	X	X	2	X	X	2	1	X	-	-	-	-	-		
Milk	White Liquid	USE FDA HOSE ONLY																-	-	-	-	-	-
Mineral Oil	Colorless Liquid	1	1	1	X	X	1	X	X	1	X	1	1	1	1	1	1	1	1	2	1		

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																	COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																				
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene			
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gafron™	UHMWPE	Santron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC									
Mineral Spirits (VM&P Naphtha)	Colorless Liquid	1	1	-	X	X	1	X	X	-	X	1	X	-	1	-	1	1	1	2	1	-			
MIPA (Isopropanolamine)	Liquid	1	-	-	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	-	-			
Mobile Therm 603	Liquid	1	1	-	-	-	1	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-			
Molasses	Brown Liquid	1	1	-	1	1	2	2	2	2	1	1	1	-	-	2	2	1	1	2	X	-			
Monochloroacetic Acid	Colorless to Light Brown Crystals	1	1	X	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Monochloroacetic Acid Solution (in H2O or Alcohol)	Liquid Solution	1	1	X	1	2	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1	-			
Monochlorobenzene	Clear Liquid	1	2	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	-	1	-	-			
Monoethanolamine	Colorless Liquid	1	2	1	1	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-	-			
Monoethylamine	Liquid @ 15 PSIG @ 120°F (49°C)	1	2	-	1	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-			
Monoethylamine Solution (70% or less)	Liquid Solution	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Monoglycerides	Liquid to Solid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Monomethylamine (Methylamine)	Liquid @ 120 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	X	-	X	1	1	1	-	-	-			
Monopentaerythritol (Pentaerythritol)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Monopentaerythritol Solution	Liquid Solution	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Monosodium Phosphate (Monobasic)	White Powder	1	1	-	-	2	-	2	2	X	2	-	-	1	1	1	-	1	1	X	X	-			
Morpholine	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Mortar, Inorganic	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Motor Oil	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-			
Mould Oil	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-			
Mouth Wash	Liquid	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-			
MTBE (Methyl Tertiary Butyl Ether)	Colorless Liquid	-	2	-	2	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-			
Muriatic Acid (Hydrochloric)	Colorless to Yellow Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-			
Mustard	Liquid	1	-	-	2	-	-	1	1	1	1	-	1	-	-	-	X	1	1	-	-	-			
N																									
n-Hexaldehyde	Colorless Liquid	1	1	-	-	2	X	X	X	2	1	-	-	-	-	-	-	-	-	-	-	-			
n-Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
n-Octane	Colorless Liquid	1	2	1	X	X	1	X	X	-	X	1	X	1	1	X	-	-	-	-	-	-			
Naphtha (Low Aromatic Content)	Liquid	1	1	-	X	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-			
Naphthalene	White Crystalline Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-			
Naphthenic Acid	Commercial Grade is Dark Fluid	1	1	-	2	-	2	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-			
Neohexane	Colorless Liquid	1	-	-	X	1	-	-	2	-	1	-	-	1	-	-	-	-	-	-	-	-			
Neutral Oil	Liquid	1	1	1	-	X	2	X	X	2	X	1	-	-	1	-	1	1	1	-	1	-			
Nickel Acetate	Green Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-			
Nickel Acetate Solution (In Water or Alcohol)	Solution	1	1	1	1	2	-	2	2	-	1	-	-	-	-	-	1	1	1	1	1	-			
Nickel Carbonate	Green to Brown Crystals/Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Nickel Chloride	Brown Deliquescent Scales	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	2	X	X	-			
Nickel Chloride Solution (In Water or Alcohol)	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	1	X	2	2	X	X	-			
Nickel Nitrate	Green Deliquescent Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	X	-	-			
Nickel Nitrate Solution (In Water or Alcohol)	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	2	-	-	2	X	-	-			
Nickel Plating Solution	Liquid	1	1	-	-	-	2	2	2	-	-	-	2	-	-	X	-	1	1	-	-	-			
Nickel Salts	-	1	1	-	-	1	1	1	1	1	1	1	1	-	1	2	-	-	-	-	-	-			
Nickel Sulfate	Yellow Green to Blue Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	X	X	-			
Nickel Sulfate Solution	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	1	-	2	1	X	X	-			
Nicotine Salts (ie Nicotine Hydrochloride)	Colorless Oil	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	X	2	-	-	-			
Niter Cake (Sodium Bisulfate)	Colorless Crystals to White Lumps	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	X	1	1	X	X	-			
Niter Cake Solution	Solution	1	1	1	1	2	-	X	X	-	2	1	1	1	-	-	-	-	-	-	-	-			
Nitric Acid (25% or less)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-			
Nitric Acid (10%)	Transparent or Yellowish Liquid	1	1	1	1	1	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-			

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Nitric Acid (25%)	Transparent or Yellowish Liquid	1	1	1	2	2	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (35% or less, 26° Baume)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	1	1	X	X	X	X	2	2	-	X	-
Nitric Acid (52% or less, 36° Baume)	Colorless to Yellow Liquid	1	2	X	2	X	X	X	X	X	1	2	X	X	X	X	X	2	2	-	X	-
Nitric Acid (61% or less, 40° Baume)	Colorless to Yellow Liquid	1	2	X	2	X	X	X	X	X	1	2	X	X	X	X	X	2	2	-	X	-
Nitric Acid (63.5% or less)	Transparent or Yellowish Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X	2	2	-	X	-
Nitric Acid (67% or less, 42° Baume)	Colorless to Yellow Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X	2	2	-	X	-
Nitric Acid (95% or less, 48.5° Baume)	Yellow Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X	2	2	-	X	-
Nitric Acid (Red Fuming)	Red Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X	-	-	-	-	-
Nitrobenzene	Yellow Liquid @ 43°F (6°C)	1	2	-	1	2	X	X	X	X	2	X	X	2	X	1	1	1	1	1	1	-
Nitroethane	Colorless Liquid	1	1	-	-	2	X	2	2	X	2	-	2	2	-	-	-	1	1	-	1	-
Nitrogen (Cryogenic Liquid)	Liquid	NO HOSE AVAILABLE														1	1	1	1	1	-	
Nitrogen (Gas)	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Nitrogen Dioxide (Nitrogen Tetroxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitrogen Fertilizer (Ammonia, Urea)	Solutions in Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen Oxide (Nitrous Oxide)	Gas	1	1	-	1	2	X	X	X	X	1	1	1	1	X	X	1	1	1	-	X	-
Nitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitromethane	Colorless Liquid	1	-	-	-	2	X	-	2	X	2	X	X	-	1	X	-	1	1	-	1	-
Nitropropane	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	-	-	1	-	-	1	1	-	1	-
Nitrosyl Chloride	Yellow-Red Liquid or Gas	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-
Nitrous Acid (Up to 10%)	Light Blue Liquid	1	1	1	-	-	-	-	-	1	-	-	1	-	1	1	X	1	1	X	X	-
Nitrous Oxide (Nitrogen Oxide)	Gas	1	1	-	1	2	X	X	X	X	1	1	1	1	X	X	1	1	1	X	-	-
Nitrous Oxide, Compressed Liquid	Liquid @ 800 PSIG @ 68°F (20°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonene (1-nonylene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonyl Alcohol (Octyl Carbinol)	Colorless Liquid	1	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonylene (Nonene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
0																						
Octadecanoic Acid (Stearic Acid)	Colorless Waxy Solid	1	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	X	2	1	X	X
Octanoic Acid (Caprylic Acid)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Octanol (Octyl Alcohol)	Colorless Liquid	1	1	-	-	-	2	2	2	2	-	1	-	1	1	2	1	1	1	1	2	-
Octene	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Octyl Acetate	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	1	-	-	-	-	-	-	-	-	-	-
Octyl Alcohol (Octanol)	Colorless Liquid	1	1	-	-	2	2	2	2	-	1	-	1	1	2	1	1	1	1	1	2	-
Octyl Aldehyde	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-
Octyl Carbinol (Nonyl Alcohol)	Colorless Liquid	1	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Octyl Phenol (Diisobutyl Phenol)	White Flakes	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Octylamine	Water White Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-
Oil (SAE Motor Oils)	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	1	1	2	-	-	-	-	-	-
Oil of Turpentine	Liquid	1	2	-	X	1	X	X	2	X	1	X	-	1	1	1	1	-	-	-	-	-
Oils, Animal (High Fatty Acid Content)	Solid to Liquids	1	2	-	2	X	1	X	X	2	2	1	X	1	-	2	1	1	1	1	1	-
Oils, Mineral (Aliphatic or Aromatic)	Liquids	1	2	-	X	X	2	X	X	X	1	2	2	1	X	-	-	-	-	-	-	2
Oils, Vegetable (Soybean, Coconut, Corn)	Liquids	1	1	-	X	X	1	X	X	-	X	1	X	-	1	-	-	-	-	-	-	1
Oleic Acid (fatty acid)	Yellow to Red Oily Liquid	1	2	2	2	2	2	X	X	2	2	2	X	X	-	2	2	2	1	1	2	1
Oleum (Fuming Sulfuric, 30% SO3 or less)	Clear to Off White Fuming Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	-	-	1	-	-	X
Olive Oil	Yellow to Green Liquid	1	2	1	2	2	X	X	X	X	2	1	X	2	1	2	2	1	1	1	2	1
Ortho-Dichlorobenzene (also meta and para)	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-	-
Ortho-xylene (1,2 Dimethylbenzene)	Clear Colorless Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	-
OS 45 Hydraulic Fluid (Silicate Ester Base)	Liquid	1	-	-	-	X	2	X	X	1	X	1	2	-	-	-	-	-	-	-	-	-
Oxalic Acid	Transparent Crystals	1	-	2	-	-	-	-	1	-	-	-	-	X	-	-	X	2	1	2	X	1

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS									
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																						
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene					
CHEMICAL	FORM (at room temperature unless otherwise stated)		FEP	Gafron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC										
Oxalic Acid (50%)	Crystals in H2O		1	2	1	2	2	X	X	X	X	2	1	2	X	X	X	-	-	-	-	-	-	-			
Oxygen	Colorless Gas		1	1	-	1	1	2	2	2	-	1	1	1	1	-	-	-	-	-	-	-	-	-			
Oxygen, Refrigerated Liquid	Liquid @ 200 PSIG @ - 231 °F (-146 °C)		NO HOSE AVAILABLE																								
Ozone	Gas		1	2	2	1	1	X	X	X	2	2	2	2	1	2	1	1	1	1	1	1	1	1			
P																											
Paint (Emulsion or Latex)	Liquid		1	1	1	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-		
Paint (Inorganic)	Liquid		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-			
Paint (Oil or Solvent Based)	Liquid or Paste		1	1	-	X	X	2	X	X	-	X	1	X	-	1	-	-	-	-	-	-	-	-			
Paint Remover	Liquid or Paste		1	2	-	X	X	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-	-			
Paint Resin	-		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Palm Oil	Yellow to Brown Solid		1	1	-	-	-	1	X	X	2	2	-	2	-	-	-	1	1	1	1	1	1	1			
Palmitic Acid (Hexadecanoic Acid)	Crystals in Hot Alcohols		1	1	1	2	2	2	X	X	2	2	1	X	1	-	-	1	2	1	1	1	X	1			
Panolin HLP Synth	Liquid		-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Papermakers Alum (Aluminum Ammonium Sulfate)	In Water		1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Paraffin (Aliphatic Hydrocarbon)	Varies from Gas to		1	1	1	X	X	1	X	X	2	X	1	X	1	-	-	2	1	1	-	1	-	-			
Paraformaldehyde	White Solid - Flakes or Powder		1	-	-	-	-	2	-	1	2	-	-	-	-	-	1	-	1	1	1	-	-	-			
Paraldehyde	Colorless Liquid		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Paranox (Detergent, Disperser; Exxon)	-		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Parapol (Liquid Polyisobutylene; Exxon)	Liquid		1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Peanut Oil	Yellow to Green Liquid		1	1	-	2	-	1	-	-	2	X	-	-	-	-	2	1	1	1	1	1	1	1			
Pelargonic Acid	Colorless to Yellow Oil		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Pentachloroethane	Colorless Liquid		1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Pentachlorophenol In Oil	In Oil (Wood		1	1	1	X	X	X	X	X	X	1	1	-	-	-	X	-	-	-	-	-	-	-			
Pentaerythritol (Monopentaerythritol)	White Powder		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Pentane	Colorless Liquid		1	X	X	X	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-			
Pentanol (Methyl Propyl Carbinol)	Colorless Liquid		1	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-	-			
Pentanone (Methyl Propyl Ketone)	Water White Liquid		1	-	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-	-			
Pentanol (Amyl alcohols, primary and secondary)	Liquid		1	2	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	1	-			
Perchloric Acid (70%)	70% or less with H2O		1	2	1	2	-	-	2	2	2	2	1	2	-	X	X	-	2	1	-	-	1	-			
Perchloroethylene	Colorless Liquid		1	2	1	X	X	X	X	X	X	1	X	2	2	X	1	1	1	1	-	X	-	-			
Petroleum Coke	Solid Pellets		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Petroleum Distillate	Liquid		1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Petroleum Ether (Naptha)	Liquid		1	1	-	X	X	2	X	X	X	1	X	1	-	X	2	1	1	-	1	-	1	-			
Petroleum Naphtha (Toluene/ Cyclohexane/Xylene)	Liquid		1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	-	-			
Petroleum Naphtha Flash Point Over 200°	Liquid		1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-			
Petroleum Oils (Refined)	Liquid		1	1	1	X	X	1	X	X	2	X	1	2	-	1	1	-	-	-	-	-	-	-			
Petroleum Oils (Sour)	Liquid		1	1	1	X	X	1	X	X	2	X	1	X	-	2	-	-	-	-	-	-	-	-			
Petroleum Paraffin Wax	Solid with Low Melt Points		1	2	2	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-			
Phenol (Carbolic Acid)	White or Pink Crystals		1	2	-	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-	-			
Phenol Acid	95% or less with H2O		1	2	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	-	X	-	-			
Phenolates	-		1	-	-	-	-	X	-	-	X	-	2	X	-	2	-	-	-	-	-	-	-	-			
Phenolsulfonic Acid	Yellow to Brown Liquid		1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-			
Phenothiazine	Greenish Powder or Flakes		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Phenyl Acetate	Water White Liquid		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Phenyl Chloride (Chlorobenzene)	Clear Volatile Liquid		1	2	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	1	1	X			
Phenylenediamine (ortho)	Colorless to Red Solid Needles		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Phorone (Diisopropylidene Acetone)	Yellow Liquid		1	1	-	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-	-			
Phosgene (Carbonyl Chloride)	Gas, Liquid 60 PSIG @ 120°F (49°C)		1	X	X	X	X	X	X	X	X	2	1	X	-	2	-	-	-	-	-	-	-	-			

<p>Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com</p> <p>1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data</p> <p>NOTE: Ratings are for the effect on the polymer only!</p>		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER - XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
CHEMICAL	FORM (at room temperature unless otherwise stated)	T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Phosphate Ester Hydraulic Fluid	Liquid	1	1	1	-	1	X	X	X	X	2	-	X	-	2	-	-	1	1	1	-	-
Phosphate Rock	Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate, Trisodium	In Water	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (100%)	Crystals	1	2	2	2	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (35% or less)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	-	-	X	1	1	X	2	1
Phosphoric Acid (50%)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	X	X	X	1	1	X	2	1
Phosphoric Acid (75%)	Colorless Liquid	1	2	1	2	2	-	-	-	-	1	1	1	X	X	X	2	2	X	X	1	-
Phosphoric Acid (85%)	Syrupy Liquid	1	2	1	2	2	X	X	X	X	1	1	1	X	X	X	2	2	X	X	1	-
Phosphoric Acid (90%)	Syrupy Liquid	1	2	1	2	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid, Spent	Liquid	1	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Photographic, Developers	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Emulsions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Fixing Solutions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Phthalic Acid	Colorless Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Acid (50%)	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Anhydride, Molten	White Crystalline Solid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picric Acid (Solution)	In Water	1	2	2	2	2	-	-	-	-	1	-	-	-	-	X	1	1	X	X	1	-
Picric Acid (Trinitrophenol)	Yellow Crystals	1	2	2	2	2	2	2	2	2	1	2	-	X	1	X	1	1	X	X	1	-
Pine Oil	Colorless to Amber Liquid	1	1	-	X	2	X	X	X	X	2	X	2	-	-	-	-	-	-	-	-	-
Pine Tar	Viscous Brown to Black Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Pinene	Colorless Transparent Liquid	1	1	-	X	X	2	X	X	X	1	-	2	1	X	1	1	1	-	-	-	-
Piperazine Hydrochloride Solution (34%)	In Water	1	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pitch	In Aromatic Hydrocarbons	1	2	X	X	X	2	X	X	X	1	X	-	1	X	-	-	-	-	-	-	-
Plating Solution Chrome (Under 120°F/49°C)	Liquid	1	1	-	2	-	-	-	-	2	2	-	-	X	X	-	X	X	-	-	-	1
Pluronic (Block Polymer with Hydroxyl) by BASF	Liquid	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Polyester Plastic	-	1	1	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-
Polyethylene Glycol	Colorless Liquid to Glassy Solid	1	-	-	-	1	2	-	1	1	1	1	1	-	2	2	-	-	-	-	-	-
Polyethylene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polypropylene Glycol	Liquid	1	1	-	1	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Polypropylene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polystyrene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polyurethane Foam (Under 125°F/52°C)	-	1	1	-	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-
Polyvinyl Acetate - Emulsions	Emulsion	1	1	1	1	1	1	-	1	2	1	-	1	1	-	1	-	-	-	-	-	-
Potash (Potassium Carbonate) Aqueous Solution	Liquid	1	1	-	1	1	-	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Acetate	White Powder	1	1	-	-	2	2	2	2	2	2	X	2	1	-	1	-	1	1	-	-	1
Potassium Bicarbonate	Colorless Crystal or White Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Bisulfate	Colorless Crystal	1	1	-	-	1	1	1	1	1	1	1	1	-	1	-	-	-	-	-	-	-
Potassium Bromate	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Potassium Bromide	White Crystals or Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Carbonate	White Granular Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	X	1
Potassium Carbonate, Liquid	Colorless to Cloudy Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Chlorate	Colorless to White Powder	1	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-
Potassium Chloride	Colorless to White Solid	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Chloride, Dry	White Solid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Chromate	Yellow Crystal	1	2	-	2	X	X	X	2	2	1	2	1	2	1	-	-	-	-	-	-	1
Potassium Cuprocyanide	White Crystalline Solid	1	-	-	-	1	1	1	1	1	1	1	1	-	2	1	-	-	-	-	-	1
Potassium Cyanide	White Crystal	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Potassium Dichromate	White Crystalline Powder	1	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS					
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																		
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
CHEMICAL	FORM (at room temperature unless otherwise stated)		FEP	Gafron™	UHMWPE	SanTiron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Potassium Ferrocyanide	Yellow Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	
Potassium Fluoride	White Crystalline Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	
Potassium Hydrate	White Solid	1	-	-	-	2	2	2	2	2	2	1	X	1	-	2	2	-	-	-	-	-	
Potassium Hydroxide (45% Caustic Potash)	Colorless to Cloudy Liquid	1	1	1	1	2	2	2	2	2	2	1	2	-	X	2	2	-	-	-	-	-	
Potassium Hydroxide, Liquid >50%	Colorless to Cloudy Liquid	1	1	-	-	1	2	2	2	2	1	X	2	X	X	2	-	-	-	-	-	-	
Potassium Iodide	White Solid	1	-	-	-	1	1	-	-	1	-	1	1	-	-	1	1	-	-	-	-	2	
Potassium Nitrate	Colorless to White Solid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	
Potassium Permanganate	Dark Purple Crystal	1	1	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	
Potassium Persulfate	White Crystal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Potassium Phosphate	Colorless to White Crystal	1	-	-	-	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	
Potassium Silicate, Other Than Dry	-	1	1	-	-	1	1	2	-	1	-	1	-	-	-	-	-	-	-	-	-	-	
Potassium Sulfate	White Crystal or Powder	1	-	-	1	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	
Potassium Sulfide	Red or Yellow Crystal or Solid	1	1	-	-	1	1	-	-	1	1	1	2	-	-	-	-	-	-	-	-	-	
Potassium Sulfite	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	
Potassium Thiosulfate	Colorless Crystal	1	-	-	-	1	-	-	-	1	-	1	1	-	-	1	-	-	-	-	-	-	
Primatol A, S, P (Ag Spray)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Propane Gas	Colorless Gas	CONTACT DENVER PRODUCT APPLICATION																-	-	-	-	-	-
Propanediol	Colorless Liquid	1	1	-	-	1	1	-	-	X	1	1	2	-	-	-	-	-	-	-	-	-	
Propanol (Propyl Alcohol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	
Propionic Acid	Colorless Oily Liquid	1	1	1	1	2	X	2	2	X	2	1	2	-	-	-	1	1	-	-	-	-	
Propyl Acetate	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	X	-	2	-	-	-	-	-	-	-	-	
Propyl Alcohol (Propanol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	-	
Propyl Aldehyde	White Water Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	
Propyl Chloride	Colorless Liquid	1	-	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-	
Propylene	Colorless Gas	1	-	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-	
Propylene Diamine	Colorless Liquid	1	-	-	-	-	2	-	2	-	2	-	X	-	-	-	-	-	-	-	-	-	
Propylene Dichloride (Dichloropropane)	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-	
Propylene Glycol	Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	-	-	-	-	-	
Propylene Oxide	Colorless Liquid	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Purina Insecticide	-	1	1	-	-	2	X	-	-	X	2	2	-	-	2	-	1	1	1	1	2	-	
Puropale RX Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-	
Pydraul 10E, 29E-LT, 30E, 60, 65E, 115SE	Liquid	1	1	-	-	2	X	-	-	2	-	-	2	-	2	-	X	1	1	1	1	-	
Pydraul 135	Liquid	1	1	-	-	-	X	-	-	-	2	1	-	2	2	-	1	1	1	-	-	-	
Pydraul 150	Liquid	1	1	-	-	2	X	X	X	X	2	1	X	2	2	X	1	1	1	1	1	-	
Pydraul 280	Liquid	1	1	-	-	2	X	X	X	X	2	2	X	2	2	X	1	1	1	-	-	-	
Pydraul 312	Liquid	1	1	-	2	X	X	X	X	X	X	1	-	2	1	X	1	1	1	-	-	-	
Pydraul 50E	Liquid	1	1	-	-	2	-	-	-	-	2	2	-	2	1	X	-	-	-	-	-	-	
Pydraul 540	Liquid	1	1	-	-	X	X	X	X	X	X	1	X	2	X	X	1	1	1	-	-	-	
Pydraul 625	Liquid	1	1	-	-	2	X	X	X	X	2	1	X	2	2	X	1	1	1	-	-	-	
Pydraul A-200	Liquid	1	1	-	-	X	X	X	X	X	X	1	X	2	2	X	1	1	1	-	-	-	
Pydraul F-9	Liquid	1	2	-	-	2	X	X	X	X	2	1	X	2	2	-	1	1	1	-	-	-	
Pyrene (Carbon Tetrachloride)	Colorless Liquid	1	2	X	X	X	X	X	X	X	X	1	X	2	X	X	X	2	2	X	2	X	
Pyrethrum	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	
Pyridine (50%)	-	1	2	-	2	-	-	-	-	X	-	X	X	-	-	X	-	1	1	1	1	-	
Pyrogard 160, 230, 630	Liquid	1	1	-	-	-	-	-	-	-	-	2	-	-	-	-	1	1	1	-	-	-	
Pyrogard 51, 53, 55	Liquid	1	1	-	-	2	X	-	-	-	2	-	-	-	-	-	1	1	1	-	-	-	
Pyrogard C, D	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-	
Pyronal (Transformer Oil)	Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	Gaotrom™	UHMWPE	Sanitrom™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC					
Q																					
Quenching Oil	Liquid	1	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	1	1	1	-
Quintolubric 822	Liquid	1	1	-	-	2	1	-	-	2	X	1	-	-	1	-	1	1	1	1	-
R																					
Ramrod (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	-
Rando Oils	Liquid	1	1	-	-	X	1	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Rape Seed Oil (Canola Oil)	Brownish to yellow Liquid	1	2	-	2	2	2	-	-	2	2	-	X	-	2	-	1	1	1	1	-
Red Oil (Commercial Oleic Acid) (MIL- 5606)	Liquid	1	2	2	2	2	1	X	X	2	2	2	X	2	1	2	2	2	1	1	2
Refined Wax (Petroleum)	-	1	1	-	-	-	1	X	X	2	-	1	-	-	1	-	1	1	1	-	1
Regal Oils R&O	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	-
Richfield A Weed Killer	-	1	1	-	-	X	2	X	X	X	X	2	X	-	-	2	-	-	-	-	-
Road Paving Compound	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Road Tar	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Round Up (Glyphosate)	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Rubilene Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	-	-	-	-	-
S																					
Salicylic Acid	White Powder	1	1	1	1	2	X	2	2	-	2	2	-	-	1	1	-	1	1	2	-
Salt Water (Sea Water)	Liquid	1	1	-	1	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2
Sauerkraut	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Sea Water	Colorless Liquid	1	1	-	1	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2
Sevin	-	1	2	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sewage	Sludge	1	1	1	1	1	2	2	X	2	-	-	2	1	1	2	X	1	1	2	1
Shampoo	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shellac	Orange to Colorless Flake	1	-	X	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Shortening	-	1	-	-	-	X	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicate of Soda	Brownish or Yellow Liquid	1	1	-	-	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-
Silicone Greases	Liquid	1	2	-	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1
Silicone Oils	Liquid	1	2	-	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1
Silver Cyanide	White Powder	1	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	1
Silver Nitrate	Colorless Crystal	1	1	-	-	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2
Skydrol 500A & 7000	Liquid	1	1	-	1	1	X	X	X	X	2	X	X	2	1	X	1	1	1	1	-
Soap Oil	Liquid	1	1	2	-	-	X	-	-	X	-	-	X	-	-	-	1	1	1	-	-
Soap Solutions	Liquid	1	1	1	-	1	1	X	X	2	1	1	1	1	1	1	1	1	1	1	-
Soap, Liquid	Liquid	1	1	-	-	1	1	2	2	1	2	1	1	-	2	2	1	1	1	-	-
Soda Ash (Sodium Carbonate)	Grayish Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	2
Soda Water	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Sodium Acetate	Colorless Crystal	1	1	-	-	2	X	2	2	X	2	X	X	1	1	1	1	1	1	1	1
Sodium Aluminate Solution	Colorless to Cloudy Liquid	1	1	-	-	1	1	2	2	1	1	1	1	-	2	2	-	-	-	-	-
Sodium Benzoate	White Crystals or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Sodium Bicarbonate	White Crystal or Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2
Sodium Bichromate Solution	Red to Clear Liquid	1	1	-	-	1	2	2	2	2	1	1	2	-	2	2	-	-	-	-	-
Sodium Bisulfate (Niter Cake)	Colorless Crystals to White Lumps	1	1	-	-	1	1	1	1	1	1	1	1	X	1	1	X	1	1	X	X
Sodium Bisulfite	White Crystals or Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	1	1	1	-	-
Sodium Borate (Borax)	White Crystals	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	2	1	1	-	2
Sodium Carbonate (Soda Ash)	Grayish Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	2
Sodium Chlorate	Colorless Crystals	1	-	-	-	1	1	1	1	2	2	1	1	-	1	1	-	-	-	-	1
Sodium Chloride	Colorless to White Crystals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	X	X	-
Sodium Chlorite Solution	Colorless to Cloudy Liquid	2	-	-	-	X	X	2	2	X	2	X	2	-	X	2	-	-	-	-	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																	COUPLINGS / ADAPTERS							
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																					
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene				
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	GaItron™	UHMWPE	SanItron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC										
Sodium Chromate	Yellow, Translucent Crystals	1	-	-	-	-	1	2	2	1	2	1	X	-	2	2	-	-	-	-	-	-				
Sodium Cyanide	In Water	1	1	-	-	1	1	1	1	1	1	1	1	2	1	1	2	1	1	X	X	-				
Sodium Cyanide	White Crystalline Powder	1	1	-	-	1	1	1	1	1	1	1	2	1	1	2	1	1	X	X	-	-				
Sodium Dichromate	Red to Red-Orange Crystals	1	-	-	-	1	1	2	2	2	1	1	2	-	-	1	-	-	-	-	-	1				
Sodium Ferricyanide	Ruby-Red Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1				
Sodium Ferrocyanide	Yellow, Transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1				
Sodium Fluoride (70%)	White Liquid	1	1	1	-	2	-	2	2	-	2	-	-	-	-	1	-	-	2	-	-	-				
Sodium Hydrate	White Solid	1	2	-	-	1	2	2	2	2	2	2	2	-	2	2	-	-	-	-	-	-				
Sodium Hydrochlorite	Pale Greenish Liquid	1	2	-	-	2	X	2	X	X	2	1	1	-	2	2	-	-	-	-	-	-				
Sodium Hydrosulfide	Colorless Needles	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-				
Sodium Hydrosulfite	Lemon Colored Powder or Flake	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-				
Sodium Hydroxide (10%)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-				
Sodium Hydroxide (40%)	Colorless Liquid	1	1	1	1	2	2	1	1	1	2	1	1	1	X	-	2	1	1	X	X	-				
Sodium Hydroxide (50%) (Under 212°F/100°C)	Colorless Liquid	1	1	2	1	2	-	-	-	-	X	-	1	-	-	-	-	-	-	-	-	-				
Sodium Hydroxide (50%) (Under 115°F/46°C)	Colorless Liquid	1	1	2	1	2	X	1	1	2	1	X	1	1	X	-	2	2	2	X	X	-				
Sodium Hydroxide (50%) (Under 180°F/82°C)	Colorless Liquid	1	1	2	1	2	X	X	X	2	2	X	2	1	X	-	X	2	2	X	X	-				
Sodium Hydroxide (60%)	White Liquid	1	2	1	-	2	X	2	2	2	2	X	2	1	X	-	X	2	2	X	X	-				
Sodium Hydroxide (25%)	Colorless Liquid	1	1	1	1	2	2	1	1	1	1	1	1	-	-	X	X	2	X	X	-	-				
Sodium Hypochlorite (20%)	White Liquid	1	2	1	-	1	X	X	X	X	-	X	1	1	2	1	X	X	2	X	X	-				
Sodium Hypochlorite (5%)	White Liquid	1	2	1	-	1	X	X	X	-	-	1	1	1	1	1	X	X	2	X	X	-				
Sodium Hyposulfate	Large, Transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-				
Sodium Metallic	Silver Solid	2	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Sodium Metaphosphate	Colorless Crystals to White Powder	1	1	-	-	2	2	2	2	2	2	2	2	1	1	1	X	1	1	1	X	-				
Sodium Nitrate	Colorless Crystal	1	1	-	-	2	X	X	X	X	2	-	2	1	1	1	2	2	2	2	2	-				
Sodium Perborate	White, Amorphous Powder	1	1	-	-	2	X	X	X	X	2	-	X	X	2	-	X	1	1	1	X	-				
Sodium Peroxide	Yellowish White Powder	1	1	2	-	-	-	-	-	-	1	1	1	1	X	X	1	X	1	1	1	X	-			
Sodium Phosphate	Colorless Crystals to White Powder	1	1	-	-	2	-	2	2	X	2	-	-	X	1	1	-	1	1	X	X	-				
Sodium Silicate	Lumps of Greenish Glass	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	1				
Sodium Sulfate	White Crystals or Powder	1	1	-	-	1	1	2	2	1	1	1	1	1	1	1	-	-	-	-	-	1				
Sodium Sulfate Decahydrate (Glauber's Salt)	Crystals or Powder	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-				
Sodium Sulfhydrate	Colorless to Cloudy Liquid	1	2	-	-	1	2	X	2	2	2	2	2	-	2	2	-	-	-	-	-	-				
Sodium Sulfide	Yellow/Brick Red Flakes or Crystals	1	1	-	-	1	1	2	2	1	1	1	1	2	1	1	-	-	-	-	-	1				
Sodium Sulfide Solution	Colorless to Cloudy Liquid	1	2	-	-	1	2	-	2	2	1	2	2	2	X	-	-	-	-	-	-	1				
Sodium Sulfite	White Crystals or Powder	1	1	-	-	2	2	2	2	2	2	-	2	-	1	1	1	1	1	-	-	-				
Sodium Sulfite Solution	Colorless to Cloudy Liquid	1	2	-	-	1	2	-	2	2	1	2	2	-	X	-	1	1	1	-	-	-				
Sodium Sulphhydrate	Colorless Needles	1	2	-	-	1	2	-	-	2	1	2	2	-	2	2	-	-	-	-	-	-				
Sodium Thiocyanate Solution	Colorless to Cloudy Liquid	1	1	-	-	1	1	2	-	1	2	1	2	-	1	-	-	-	-	-	-	-				
Sodium Thiosulfate (HPO)	White Powder	1	1	-	-	-	1	1	1	1	1	1	-	1	1	1	X	1	1	2	X	-				
Sodium Tripolyphosphate (STPP)	White Powder	1	2	-	-	-	-	-	-	-	2	X	-	-	-	-	-	1	1	X	X	-				
Solnus Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	1	1	1	1	1	1	-				
Sour Crude Oil	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-				
Soybean Oil	Pale Yellow Oil	1	1	1	2	X	2	X	X	2	2	1	2	2	1	2	1	1	1	-	-	-				
Spent Acid	Liquid	1	2	2	X	X	X	X	X	X	X	1	2	X	X	X	-	1	1	-	-	-				
Stannic Chloride	Colorless, Fuming Liquid	1	1	-	-	-	2	2	2	2	X	1	X	X	X	2	X	-	-	-	X	-				
Stannic Sulfide	Yellow to Brown Powder	1	2	-	-	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	-				
Stannous Chloride (Under 150°F)	White Mass	1	1	-	-	2	1	1	1	1	1	1	1	1	X	1	-	-	-	-	-	1				
Starch	White Amorphous Powder	1	1	-	1	1	2	1	1	2	-	1	1	-	1	1	-	-	-	-	-	-				
Starch Gum (Dextrin)	Yellow or White Powder	1	1	-	-	1	1	-	-	1	X	1	-	-	1	1	-	1	1	-	-	1				

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)	FEP	GaIrom™	UHMWPE	Sanitrom™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
Stauffer Jet 1	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Stauffer Jet 2	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Steam	Gas	USE STEAM HOSE ONLY																				
Stearic Acid (Octadecanoic Acid)	Colorless Waxy Solid	1	1	1	1	2	2	2	2	2	2	1	2	2	1	1	X	2	1	X	X	-
Stearin	Colorless crystal or	1	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
Stoddard Solvent	Clear petroleum	1	2	-	2	X	2	X	X	-	X	1	-	1	1	2	2	1	1	-	1	-
STPP (Sodium Tripolyphosphate)	White Powder	1	2	-	-	2	-	2	2	-	2	X	-	-	-	-	2	1	X	X	-	
Straight Synthetic Oils	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	
Styrene (Monomer)	Colorless Oily Liquid	1	2	-	X	X	X	X	X	-	X	2	-	X	2	-	2	X	2	X	2	-
Sucrose Solutions	Liquid	1	1	-	1	-	1	1	1	1	1	-	1	-	-	-	1	1	1	-	-	-
Sugar, Liquid, Blended	Liquid	1	1	-	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-	
Sugar, Syrup	Liquid	1	1	-	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-	
Sulfamic Acid	In Water	1	1	1	1	2	X	X	X	-	2	1	2	-	X	X	-	-	-	-	-	
Sulfamic Acid 10% Under 170°F (77°C)	Colorless Liquid	1	X	-	-	-	-	X	X	-	-	2	2	-	-	-	-	-	-	-	-	
Sulfate Liquors Under 150°F (66°C)	-	1	-	-	-	-	-	-	-	-	-	-	-	X	1	1	-	-	-	-	1	
Sulfur (Under 200°F (93°C))	Yellow Crystals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sulfur Chloride	Yellow Oily Liquid	1	2	-	-	X	X	X	X	X	X	1	2	-	2	2	X	X	2	-	X	
Sulfur Dioxide	Colorless Gas or	-	-	-	1	2	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-	
Sulfur Dioxide (Dry)	-	1	2	-	-	2	X	X	X	X	X	1	2	-	X	1	2	1	1	1	1	
Sulfur Dioxide (Liquid)	Colorless Liquid	1	-	1	-	1	X	X	X	2	2	X	2	-	-	X	-	-	-	-	-	
Sulfur Dioxide (Moist)	-	1	2	1	-	1	X	X	X	2	1	2	2	-	-	X	-	-	-	-	-	
Sulfur Hexafluoride (Gas)	Colorless Gas	1	1	-	-	1	2	2	2	1	1	2	2	-	1	2	-	-	-	-	-	
Sulfur Trioxide (Dry)	Solid	1	2	-	-	2	X	X	X	X	X	1	X	X	-	1	2	2	2	2	-	
Sulfuric Acid (10%)	Colorless Water	1	1	1	1	2	1	1	1	1	1	1	1	X	-	-	X	X	2	X	X	
Sulfuric Acid (100%)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	2	X	X	-	-	2	X	2	X	X	
Sulfuric Acid (30%)	Colorless Water	1	1	1	1	2	2	2	1	1	1	1	X	X	-	X	X	2	X	X	-	
Sulfuric Acid (50%)	Colorless Water	1	1	1	1	1	X	X	X	2	1	1	1	X	X	-	X	X	2	X	X	
Sulfuric Acid (60%) (48.5° Baume)	Colorless Liquid	1	1	1	1	1	X	X	X	X	1	1	1	X	X	-	X	X	2	X	X	
Sulfuric Acid (75%)	Colorless to Brown	1	1	1	1	2	X	X	X	X	2	1	2	X	X	-	X	X	2	X	X	
Sulfuric Acid (88%) (64.7° Baume)	Colorless Liquid	1	2	1	2	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-	
Sulfuric Acid (93%)	Colorless to Brown	1	X	1	2	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-	
Sulfuric Acid (96%)	Colorless Liquid	1	X	1	2	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-	
Sulfuric Acid (98%)	Colorless to Brown	1	X	1	2	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-	
Sulfuric Acid, Fuming (Oleum)	Colorless to Dark	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	1	-	-	X	
Sulfurous Acid (10%)	Colorless Liquid	1	1	1	1	1	X	X	X	-	2	1	1	X	-	1	-	X	2	1	X	
Sulfurous Acid (75%)	Colorless Liquid	1	1	1	1	1	X	X	X	X	1	1	X	X	-	X	X	2	X	X	-	
Sun R&O Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	
Suntac HP Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	
Suntac WR Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	-	
Sunvis Oils 700, 800, 900	Liquid	1	1	-	X	X	1	-	-	-	X	1	-	-	1	2	1	1	1	-	-	
Synthetic Oil (Citgo)	Liquid	1	1	-	-	X	-	-	-	-	X	-	-	-	1	2	1	1	1	-	-	
Syrup	Viscous Liquid	1	1	-	1	-	-	1	1	2	-	1	-	-	-	-	1	1	-	-	-	
T																						
TEL (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	-	X	2	X	X	X	1	X	-	2	1	-	-	-	-	-	-	
Tellus Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	
Tenol Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	-	-	
Tergitol (Ethoxylates and Ethoxysulfates of Alcohol)	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	2	-	
Terpineol	Colorless Liquid or Crystal	1	1	-	-	-	X	X	-	X	-	2	1	2	2	-	-	-	-	-	-	

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS																COUPLINGS / ADAPTERS				
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	FORM (at room temperature unless otherwise stated)		FEP	Gafron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC					
Tertiary Butyl Alcohol	Colorless Liquid or Crystal		1	2	-	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Tetrachlorobenzene	White Crystal		1	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Tetrachloroethane (Acetylene Tetrachloride)	Colorless Liquid		1	X	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-
Tetrachloroethylene	Colorless Liquid		1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-
Tetrachloromethane	Colorless Liquid		1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Tetrachloronaphthalene	Oily Liquid to Crystalline Solid		1	-	-	-	-	-	-	-	-	-	2	-	X	-	-	-	-	-	-	-
Tetraecanol	White Solid		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetraethyl Lead (TEL)	Colorless Oily Liquid		1	2	-	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-
Tetraethylene Glycol	Colorless Liquid		1	2	-	-	-	2	-	2	-	1	2	2	-	-	-	-	-	-	-	-
Tetrahydrofuran (THF)	Colorless Liquid		1	X	-	-	2	X	X	X	X	2	1	X	X	1	X	2	-	-	-	X
Tetrahydrodicyclopentadiene (JP 10) ²	-		-	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
² Aircraft fueling hose only for fueling operations.	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetralin	Colorless Liquid		1	-	-	X	X	X	X	X	X	1	X	-	2	-	-	-	-	-	-	X
Theobromo Oil (Cocoa Butter)	Liquid above 95°F (35°C)		1	1	2	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-
THF (Tetrahydrofuran)	Colorless Liquid		1	X	-	-	2	X	X	X	X	2	1	X	X	1	X	2	-	-	-	X
Thiopen	-		1	-	-	-	X	X	X	X	X	2	2	-	-	-	-	-	-	-	-	-
Tin Tetrachloride	Colorless Liquid		1	-	-	-	2	-	2	X	-	-	2	-	-	-	-	-	-	-	-	-
Titanium Tetrachloride	Colorless Liquid		1	-	-	-	X	X	-	-	X	X	2	-	-	-	-	1	2	2	X	X
Toluene (Toluol) (Methyl Benzene)	Colorless Liquid		1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	-
Toluene Diisocyanate (Hylene)	Yellow Liquid		1	-	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-
Toluene Diisocyanate (Isocyanate)	Water White to Yellow Liquid		1	2	1	X	X	X	X	X	X	1	-	-	1	-	1	1	1	-	-	-
Toluidine	Yellow Liquid or White Crystal		1	-	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-
Toluol (Toluene)	Colorless Liquid		1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	-
Transformer Oil (Askarel Types) ¹	Liquid		1	2	2	X	X	X	X	X	X	1	X	2	1	X	1	1	1	-	1	2
Transformer Oil (Petroleum Type) ¹	Liquid		1	1	-	-	X	1	X	X	2	X	1	X	2	1	2	1	1	1	1	-
¹ Petroleum hose only.	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission Fluid (Type A)	Liquid		1	1	-	-	X	1	X	X	2	X	1	-	1	2	-	1	1	1	-	1
Tributoxyethyl Phosphate	Yellow Liquid		1	1	X	-	2	X	X	X	-	2	-	X	X	2	-	1	-	-	X	-
Tributyl Phosphate	Colorless Liquid		1	1	X	-	X	X	X	X	X	1	X	X	-	-	1	-	-	X	-	-
Tricalcium Aluminate (Calcium)	Crystals or Powder		1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene	White Crystal or Colorless Liquid		1	2	-	-	-	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Trichloroethane 1,1,1 (Methyl Chloroform)	Colorless Liquid		1	X	-	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Trichloroethylene	Colorless Liquid		1	1	X	X	X	X	X	X	X	1	X	2	2	-	X	-	1	X	1	-
Trichloropropane	Colorless Liquid		1	-	-	-	-	2	-	X	2	X	1	X	-	-	-	-	-	-	-	-
Tricresyl Phosphate	Colorless Liquid		1	-	X	-	1	X	X	X	X	2	1	X	1	1	-	1	-	2	X	-
Triethanolamine (TEA)	Colorless Viscous Liquid		1	1	-	-	1	2	2	2	2	2	X	2	1	-	2	-	1	1	-	1
Triethylamine	Colorless Liquid		1	-	-	-	2	2	X	X	-	X	2	-	-	-	-	-	-	-	-	-
Triethylene Glycol	Colorless Liquid		1	-	-	-	-	2	-	2	-	2	2	2	-	-	-	-	-	-	-	-
Trihydroxybenzoic Acid (Gallic Acid)	In Alcohol or Glycerol		1	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	1	1	-	1
Trimethyl Phosphite	Colorless Liquid		-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene (Mesitylene)	Liquid		1	-	-	X	X	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Trinitrophenol (Picric Acid)	Yellow Crystals		1	2	2	2	2	2	2	2	2	1	2	-	X	1	X	1	1	X	X	1
Trioctyl Phosphate	Liquid		-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenyl Phosphate	Colorless Powder		-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tripolyphosphate (STPP), (Sodium)	White Powder		1	2	-	-	2	-	2	2	-	2	X	-	-	-	-	-	2	1	X	X
Trisodium Phosphate (TSP)	Colorless Crystal		1	-	-	-	1	2	2	X	2	2	1	X	-	-	-	-	-	-	-	-
Tung Oil	Yellow Drying Oil		1	2	-	X	X	2	X	X	X	1	2	X	-	2	1	1	1	1	1	-
Turpentine	Liquid Oil		1	X	1	X	X	2	X	X	X	1	X	X	1	1	-	1	1	1	2	-

Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com 1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the effect on the polymer only!		GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS						
		CHEM MASTER™ XTREME™ FEP	CHEM MASTER™ PLUS XLPE	CHEM MASTER™ PLUS UHMWPE	FOOD & BEVERAGE MASTER																	
CHEMICAL	FORM (at room temperature unless otherwise stated)	T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		FEP	Gaion™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC						
U																						
Ucon Hydrolube Types 150CP, 200CP	Liquid	1	1	-	-	1	1	-	-	-	1	-	-	-	1	2	1	1	1	1	1	-
Ucon Hydrolube Types 275CP, 300CP, 550CP	Liquid	1	-	-	-	1	X	X	-	X	1	-	-	2	2	-	-	-	-	-	-	
Ucon M1	Liquid	1	1	-	-	1	1	-	-	1	-	-	-	1	2	1	1	1	1	1	1	-
Undecanol (Undecyl Alcohol)	Colorless Liquid	1	-	-	-	1	-	2	-	-	2	2	-	-	-	-	-	-	-	-	-	
Undecyl Alcohol (Undecanol)	Colorless Liquid	1	-	-	-	1	-	2	-	-	2	2	-	-	-	-	-	-	-	-	-	
Union Hydraulic Tractor Fluid	Brown Liquid	1	1	-	-	X	1	-	-	X	-	-	-	1	2	1	1	1	1	1	1	-
Urea Solution (100%)	Liquid	1	1	1	1	1	2	1	1	1	2	-	1	1	1	2	1	1	1	-	-	
V																						
Varnish	-	1	2	-	X	X	X	X	X	X	2	X	X	1	-	2	1	1	-	2	-	
Vegetable Oils	Liquids	1	2	1	2	2	-	X	X	2	X	-	1	X	1	2	1	1	1	1	-	
Versilube F-50, F-44	Liquid	1	-	-	-	2	2	2	2	2	2	1	2	-	1	2	1	1	1	1	1	
Vinegar	Brownish to Colorless Liquid	1	1	-	1	-	2	2	2	2	2	1	X	X	-	1	X	2	1	X	X	
Vinyl Acetate	Colorless Liquid	1	1	X	2	X	X	X	X	2	X	X	X	-	-	-	1	2	1	2	-	
Vinyl Chloride (Monomer)	-	1	2	-	-	X	X	X	X	X	2	X	X	-	X	2	1	1	1	X	-	
Vinyl Fluoride	Colorless Gas	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Vinyl Trichloride (Trichloroethane)	Colorless Liquid	1	-	-	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	
Vital Oxide Disinfectant (70°F)	Liquid	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Vitrea Oils	Liquid	1	1	-	-	X	1	-	-	X	-	-	-	1	2	1	1	1	1	-	-	
VM&P Naptha (Mineral Spirits)	Colorless Liquid	1	1	-	X	X	1	X	X	-	X	1	X	-	1	-	1	1	2	1	-	
W																						
Waste Paint	Liquid to Semi-Solid Paste	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water	Liquid	1	1	1	1	1	1	1	1	1	-	1	1	1	1	2	1	1	1	1	-	
Water (Brine)	Liquid	1	1	-	1	2	1	1	2	1	1	1	-	1	1	-	-	-	-	-	1	
Water (Deionized)	Liquid	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Water (Distilled)	Liquid	1	1	1	1	1	1	1	2	1	-	1	1	1	1	-	-	-	-	-	1	
Water (Potable)	Liquid	USE FDA HOSE ONLY														-	-	-	-	-	1	
Water Glycols	Liquid	1	1	1	1	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	
Water in Oil Emulsions	Liquid	1	1	1	2	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	
White & Bagley No. 2190 Cutting Oil	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wines	Liquid	1	2	-	1	X	X	X	X	X	1	X	1	1	-	2	2	2	1	-	-	
Wood Oil	Liquid	1	1	-	-	X	1	X	X	2	X	1	2	1	1	1	-	-	-	-	-	
X																						
Xylene (Dimethylbenzene)	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	-	-	-	-	-	-	
Xylenol (Dimethylphenol)	White Solid, Liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-	
Z																						
Zeric	-	1	1	-	-	X	1	-	-	-	X	-	-	-	2	2	-	-	-	-	-	
Zinc Acetate	White Crystal	1	1	-	-	2	X	2	2	X	2	X	X	X	1	1	1	1	1	1	1	
Zinc Chloride Solutions	Colorless to Cloudy Liquid	1	1	-	1	-	1	2	2	1	2	1	1	X	1	2	X	2	1	X	X	
Zinc Chromate	Yellow Solid	1	1	-	-	-	-	-	-	-	-	1	X	-	-	-	1	1	-	-	-	
Zinc Hydrate	-	1	-	-	-	-	-	-	-	-	-	-	X	-	1	-	-	-	-	-	-	
Zinc Oxide	White or Gray Powder	1	-	-	-	-	-	-	-	-	-	-	X	-	1	-	-	-	-	-	-	
Zinc Sulfate Solutions	Colorless to Cloudy Liquid	1	1	-	-	2	2	X	X	2	2	-	2	X	2	2	X	2	1	X	X	



DRIVEN BY POSSIBILITY™