

AGRICU

AIR BREA

AIR

AIR AND
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FOOD
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PETRO

PRE

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

Please read and observe all warnings and caution statements throughout this catalog.

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	Gatron™	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

AGRICULTURE
AIR BREATHING
AIR DUCT
AIR AND MULTI-PURPOSE
CHEMICAL
FOOD AND BEVERAGE
ENGINE AND MARINE
MATERIAL HANDLING
MINING
OILFIELD
PETROLEUM
PRESSURE WASH AND WASHDOWN
STEAM
WATER
CLAMPS
COUPLINGS AND FERRULES
HOSE FINDER

Resistance to:

Gates Type	Common Name or Trade Name	Abrasion	Permeation to				High Temp	
			Gases	Petroleum Oils	Refined Fuels	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	Fair	Good	
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	Gatron™	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	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	

¹ Registered Trademark of DuPont® Corporation

² Registered Trademark of 3M® Corporation

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Chemical	Form (at room temperature unless otherwise stated)	Hose / Polymers										Couplings / Adapters				
		NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Mylon	PVC	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene		
Ammonium Hydroxide (16%, 20%, 26%, & 30%)	Colorless Liquid	-	-	-	2	-	-	-	-	2	1	1	-	X	1	
Ammonium Hydroxide (up to 30% NH3)	Colorless Liquid	X	2	2	2	2	1	1	X	X	2	1	1	-	X	1
Ammonium Metaphosphate	White Powder	2	2	2	1	-	2	-	-	2	1	1	X	-	1	
Ammonium Nitrate	Colorless Crystals	1	-	-	-	-	-	-	-	-	1	1	2	X	1	
Ammonium Nitrate Fertilizer (20.5% N, or 33.5% N)	White Powder	1	-	-	-	-	-	-	-	-	1	1	2	X	1	
Ammonium Nitrate Prills and Oil	White Powder	1	-	-	-	-	-	-	-	-	1	1	2	X	1	
Ammonium Nitrate Solution (up to 83%)	Colorless Liquid	1	1	-	1	1	1	1	1	1	1	1	2	X	1	
Ammonium Nitrite	Colorless Crystals	X	X	2	-	-	-	1	-	-	1	1	-	-	1	
Ammonium Persulfate	White Powder	-	X	-	X	-	-	-	-	-	1	1	-	X	X	
Ammonium Phosphate	White Powder	1	-	-	-	-	-	-	-	X	2	1	X	-	1	
Ammonium Phosphate Dihydrate	White Powder	1	1	1	1	1	1	1	1	1	X	2	1	X	-	1
Ammonium Sulfide Solution	Colorless Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Sulfide	White Powder	1	-	-	-	-	-	-	-	-	1	1	X	X	1	
Ammonium Sulfide Solution	Colorless Liquid	1	-	1	1	1	1	1	1	1	1	1	X	X	1	
Ammonium Thiocyanate	White Powder	1	1	-	1	1	1	1	1	1	1	1	-	-	1	
Ammonium Thiocyanate Solution	Colorless Liquid	X	X	X	2	X	X	X	X	X	X	1	1	X	1	X
Amyl Alcohol	Colorless Liquid	2	2	2	2	1	2	1	2	2	1	1	1	1	-	
Amyl Chloride	Colorless Liquid	-	-	-	-	-	-	-	-	X	1	1	-	-	X	
Amyl Chloride Solution	Colorless Liquid	X	X	X	1	X	X	X	X	X	1	1	-	-	X	
Amyl Chloride Solution	Colorless Liquid	X	X	X	1	X	X	X	X	X	1	1	-	-	-	
Amyl Chloride Solution	Colorless Liquid	X	X	X	1	X	X	X	X	X	1	1	-	-	-	
Amyl Chloride Solution	Colorless Liquid	-	-	-	-	-	-	-	-	-	1	1	-	-	-	



CHEMICAL RESISTANCE TABLE

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Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers														Couplings / Adapters						
		Chem Master™ X-Treme™ 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
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	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	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	X	1	X	1	1	X	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
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 (Aq Spray, Concentrated)	Liquid	1	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	-	-	X	1	1	-	X	1	
Basic Copper Arsenate	Blue to Green Powder	1	1	-	-	-	-	2	1	-	-	1	2	-	-	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	X	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	-	1
Benzene (Benzol)	Colorless to Yellow Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	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	1	X	X	1	X	1	1	1	1	1	1	X
Benzophenone	White Powder	1	1	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Benzotrichloride	Colorless to Yellow Liquid	1	-	-	X	X	X	X	X	X	1	-	X	2	X	-	-	-	-	-	-	-
Benzyl Acetate	Water White Liquid	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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		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
		FEP	Galton™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC					
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	-	-	-	-	X	-	-	-	-	-	-	-	-	-	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	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
Bio-Diesel (B100)	Liquid 125°F (52°C) and Above	1	X	X	X	X	X	X	X	X	X	1	X	X	2	X	2	2	1	1	2
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	X	1	X	2	-	X	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
Bordeaux Mixture (Slaked Lime & Copper Sulfate)	In Water	1	1	1	1	1	1	2	2	2	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	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
Brake Fluid (Synthetic) DOT2, DOT3, DOT4	Liquid	1	1	-	1	1	X	X	X	X	1	X	X	1	-	2	1	1	1	-	1
Brine (Salt)	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2
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
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	
Butadiene (1, 3)	Gas	1	1	-	X	X	2	X	X	X	X	1	X	-	1	X	-	1	1	-	1
Butanal (Butyraldehyde)	Water White Liquid	1	2	-	-	X	X	X	X	X	X	X	2	-	-	-	-	-	-	-	
Butandiol (Butylene Glycol)	Colorless Dily 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	
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	
Butyric Acid	Colorless Liquid	1	1	1	1	2	-	2	2	X	2	1	X	1	X	-	-	-	-		
Butyl Carbitol (Diethylene Glycol Butyl Ether)	Colorless Liquid	1	1	-	2	2	2	X	X	2	2	1	-	1	-	-	1	1	1	1	



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		T FEP	K Gator™	L UHMWPE	S Sanitron™	P EPDM	C NBR	D SBR	D NR	A Chloroprene	H Butyl	V Fluorocarbon	M Hypalon™	J CPE	Z Nylon	G PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Butyl Cellosolve (EG Monobutyl Ether)	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Butyl "Dixtol" for 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	X
Butyl Acrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Butyl Alcohol (Butanol)	Colorless Liquid	1	1	1	1	1	1	1	2	1	1	2	1	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	-	-	-	-	-	-	-	-	-
Butyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Butyl Ether	Colorless Liquid	1	1	-	-	-	2	X	X	2	2	X	-	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-Butanethiol)	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	X	1	-	2	-	1	1	1	1	1	-
Butylamine	Colorless Liquid	1	1	-	-	-	X	X	X	X	X	X	2	-	-	1	1	1	1	1	X
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	X	1	1	1	2	-
Butyric Anhydride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	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	1
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	-
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	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	-	1
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	-	-	-	-	-	-	-	-	-
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	1
Calcium Chloride, Liquid (Not For Food)	In Water or Alcohol	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	-	-	-	-	-	-
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	-	-	-	-	-

AGRICULTURE
AIR BREATHING
AIR DUCT
AIR AND MULTI-PURPOSE
CHEMICAL
FOOD AND BEVERAGE
ENGINE AND MARINE
MATERIAL HANDLING
MINING
OILFIELD
PETROLEUM
PRESSURE WASH AND WASHDOWN
STEAM
WATER
CLAMPS
COUPLINGS AND FERRULES
HOSE FINDER
CHEMICAL RESISTANCE TABLE

CHEMICAL RESISTANCE TABLE



Contact Denver Product Appli or recommendations for chemicals not listed.
Phone: (303) 744-5070
email: fppasupport@gates.com

1 = Preferred - Constant Contact
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NOTE: Ratings are for the effect on the polymer only!

AGRICULTURE	Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters							
			Chem Master™ X-Treme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
AIR BREATHING			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
AIR DUCT			FEP	Galton™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC						
AIR AND MULTI-PURPOSE																							
CHEMICAL	Calcium Hypochlorite Solutions	In Water or Alcohol	1	1	X	-	-	-	X	X	X	2	2	2	1	-	1	1	X	2	X	1	
	Calcium Metasilicate (Calcium Silicate)	White Powder	1	1	-	-	-	2	2	1	-	2	1	2	1	-	1	1	1	1	1	1	
FOOD AND BEVERAGE	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	1	
ENGINE AND MARINE	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	
MATERIAL HANDLING	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	-	-	-	-	-	-	-	
MINING	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	
OILFIELD	Caproic Acid	Colorless or Yellow Liquid	1	1	1	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
	Caprolactam	White Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
PETROLEUM	Caprolactam, Molten (Above 156°F/69°C)	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
	Caprylic Acid (Octanoic Acid)	Colorless, Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
PRESSURE WASH AND WASHDOWN	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	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	
	Carbolic Acid (Phenol, 82-95% in Creosols)	Liquid	1	2	-	-	2	X	X	X	X	2	2	X	1	X	X	X	1	1	2	X	
STEAM	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	
WATER	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	2	
	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	2	
CLAMPS	Carbonic Acid	Liquid	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	-	-	-	-	-	-	
HOSE FINDER	Casein (White amorphous solid)	In Concentrated Acid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-		
	Castor Oil	Pale Yellow or Colorless Liquid	1	1	-	-	-	1	X	X	1	2	1	1	1	-	1	1	1	1	1		
COUPLINGS AND FERRULES	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	-	-	-	-		
CHEMICAL RESISTANCE TABLE	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	-	1	-	1	1	1	1	-		
	Cellosolve Butyl (Eg Butyl Ether)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-		
	Cellulose	Solid, Many Forms	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-		
	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		

AGRICULTURE

FOR BREATHING

DUCT

AND MULTI-
PURPOSE

CHEMICAL

AND
STORAGE

AND
CLEANING

GENERAL
CLEANING

GENERAL
CLEANING

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CLEANING

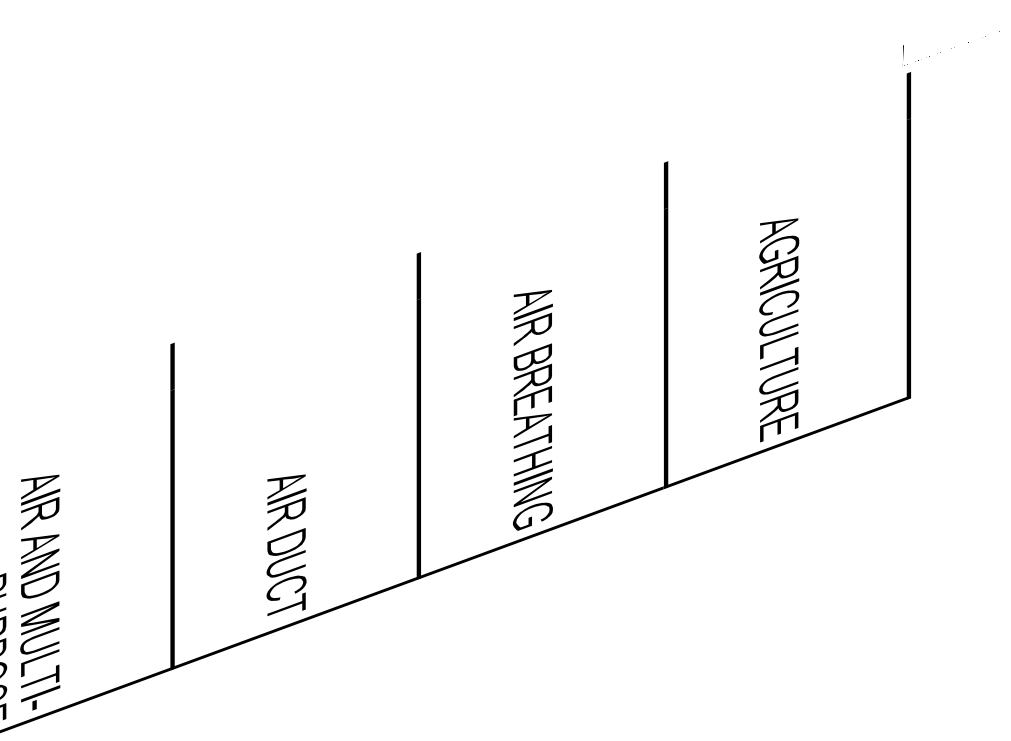
GENERAL
CLEANING

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																					
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	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	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	-	-	-	-	-	-

Chemical
Form
(at room temperature
unless
otherwise stated)

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				

CHEMICAL RESISTANCE TABLE





CHEMICAL RESISTANCE TABLE

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		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
		Chem Master™ X-Treme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Dimethyl Phthalate	Colorless Dily 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	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	-	-	-	-	-	-	-	-	-	-
Diethyl Adipate di-(2-ethylhexyl) adipate	Light Colored Oily Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethyl Phosphite, di-(2-ethylhexyl) phosphite	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Diethyl 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
Diethyl Sebacate, di-(2-ethylhexyl) sebacate	Pale Straw Colored Liquid	1	1	-	1	-	X	X	X	X	2	1	X	X	-	-	-	-	-	-	-	-
Diethylamine 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	-	-	-	-	-	-	-	-	-	-
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	-
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	-	-	-	-	-	-

AGRICULTURE
AIR BREATHING
AIR DUCT
AIR AND MULTI-PURPOSE
CHEMICAL
FOOD AND BEVERAGE
ENGINE AND MARINE
MATERIAL HANDLING
MINING
OILFIELD
PETROLEUM
PRESSURE WASH AND WASHDOWN
STEAM
WATER
CLAMPS
COUPLINGS AND FERRULES
HOSE FINDER
CHEMICAL RESISTANCE TABLE

CHEMICAL RESISTANCE TABLE



AGRICULTURE	Contact Denver Product Appl or recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com		Gates Hose / Polymers													Couplings / Adapters								
	AIR BREATHING	1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data	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	
AIR DUCT	AIR AND MULTI-PURPOSE	Chemical	Form (at room temperature unless otherwise stated)	FEP	Gator™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	Fertilizer (Liquid Manure)	Liquid	1	1	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOOD AND BEVERAGE	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	-	1	-	-	-	-	-	-	-	-	-
ENGINE AND MARINE	Fixing Solution (Photo)	Liquid	1	1	-	-	-	2	2	2	-	2	-	2	-	1	1	-	1	1	-	1	-	1
	Flint	Gray, Brownish, Black	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Floor Wax (Temperature Dependent)	Varies	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MATERIAL HANDLING	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
MINING	Fluorine	Pale Yellow Gas	NO HOSE AVAILABLE																					
	Fluorine (Liquid)	Yellow Liquid	NO HOSE AVAILABLE																					
	Fluorosilicic Acid (50%)	Colorless Liquid	1	1	1	1	2	X	-	-	2	X	-	2	1	X	X	-	-	-	-	1	-	1
OILFIELD	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	-	-	-	-	-	-	-
PETROLEUM	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	-	-	-	-	-	-	-	-	-	-	-	-
PRESSURE WASH AND WASHDOWN	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																					
STEAM	Freon 23	Clear Liquid	SPECIAL HOSE REQUIRED																					
	Fruit Juices	Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	Fuel Oil (ASTM I-G)	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	-	-
WATER	Fumaric Acid	Colorless Crystals	1	1	1	1	2	-	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-	-
	Fumaric Acid Solution (Allomalaic Acid)	Liquid	1	1	-	-	2	1	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-	-
CLAMPS	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	1	2
COUPLINGS AND FERRULES	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	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	-
HOSE FINDER	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	1	-
	Fyrguard 150, 200	-	1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	-	1	1	1	1	1	-
CHEMICAL RESISTANCE TABLE	Fyrquel 15R60, 220R60, 550R60	-	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	1	1	-	-	-	1
	Gallic Acid Solution	In Alcohol Solution	1	1	-	1	-	X	2	2	X	2	1	-	1	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	1	X



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Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters							
		Chem Master™ X-Treme™ EEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
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
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	-
Glue	Varies	1	1	-	-	X	2	X	X	2	X	1	1	-	2	1	2	1	1	1	X	-
Glycerine (Glycerol)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	-
Glycerol (Glycerine)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	-	1	2	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	-
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	-
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	-

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			Chem Master™ X-Treme™ 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	
AIR BREATHING	Form (at room temperature unless otherwise stated)		FEP	Gator™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
AIR DUCT	Chemical	Form (at room temperature unless otherwise stated)																						
CHEMICAL	Hexamethylenediamine, Solution	Colorless Flat Solid Leaflets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOOD AND BEVERAGE	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	-	1	-
	Hexanol (Hexyl Alcohol)	Colorless Liquid	1	1	-	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	1	2	-
	Hexanone (Ethyl Propyl Ketone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	2	X	X	-	-	-	-	-	-	-
ENGINE AND MARINE	Hexene	Colorless Liquid	1	-	-	X	X	2	X	X	-	X	1	-	1	-	-	1	1	1	1	-	1	-
	Hexyl "Cellosolve" (EG monoethyl 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	1	2	-
	Hexyl Methacrylate	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MATERIAL HANDLING	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	-	1	-
	Hexylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
	Honey	Yellow Liquid	1	-	-	-	1	1	-	1	1	-	1	-	1	-	-	1	-	-	-	-	-	-
MINING	Houghto-Safe 1055, 110, 115, 1120, 1130	Liquid	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-	
	Houghto-Safe 271, 416, 520 & 616, 620	Liquid	1	1	-	-	1	1	-	-	-	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	-	
OILFIELD	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-Chack Oil	Liquid	1	1	-	-	-	1	-	-	-	-	1	-	-	1	-	1	1	1	-	-	-	
PETROLEUM	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 AZR80, A, B, AA, C	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	1	-	1	-	1	1	1	1	-	
PRESSURE WASH AND WASHDOWN	Hydrasol A (Textile Dyeing)	-	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	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	1	
STEAM	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	-	
WATER	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	-	-	-	-	-	-	
CLAMPS	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	-	-	
COUPLINGS AND FERRULES	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	X	-	
HOSE FINDER	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	X	-	
	Hydrochloric Acid, anhydrous	Colorless Fuming Gas	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	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	-	
CHEMICAL RESISTANCE TABLE	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	-	-	-	-	-	-	



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Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters						
		Chem Master™ Treme™ EEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Sanitron™ Food & Beverage Master	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass
Jet Fuel JP5 ²	Liquid	1	1	-	X	X	1	X	X	X	X	X	X	1	X	2	1	1	2	1	-
Jet Fuel JP8 ²	Liquid	1	1	-	X	X	1	X	X	X	X	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	2	-
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	2
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	-	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	X
Lard Oil	Colorless to Yellow Liquid	1	1	-	-	-	-	-	-	2	-	X	-	-	-	1	1	1	1	X	-
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	-
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	-	-	-
Liqroin	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

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Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters							
		Chem Master™ X-Treme™ 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
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	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	1
Mercuric Chloride	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	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	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	1
Methyl Alcohol (Methylalyl Alcohol)	Colorless Liquid	1	-	-	-	-	1	-	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	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	-	-	-
Methyl Acetate	Colorless Liquid	1	2	-	-	2	X	X	X	X	2	X	X	1	1	X	1	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	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	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	-
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	-	-	-

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AGRICULTURE			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			
AIR BREATHING	AIR DUCT	AIR AND MULTI-PURPOSE	Chemical	Form (at room temperature unless otherwise stated)	FEP	Galton™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
					CHEMICAL	Methyl Butanol (2-Methyl-1-Butanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Methyl Butyl Ketone (MBK)	Colorless Liquid	1	1	-	-	2	X	X	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	1	1
	Methyl Carbital (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	X	1	X	1	1	-	-	-	-	-	-	-	-	-
FOOD AND BEVERAGE	Methyl Cellulosolve (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	X	X	X	1	-	-	-	-	-	-	-	-	-	-
ENGINE AND MARINE	Methyl Chloride	Liquid @ 160PSIG @ 120°F (49°C)	1	2	-	X	X	X	X	X	X	X	X	1	X	X	X	X	X	1	1	1	1	1	1	1
	Methyl Chloroform (1,1,1 Trichloroethane)	Colorless Liquid	1	2	-	X	X	X	X	X	X	X	X	1	X	X	X	X	X	-	-	-	-	-	-	-
	Methyl Chloroformate	Colorless Liquid	1	-	-	-	X	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	1	1	1	1	1	1
MATERIAL HANDLING	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	X	2	X	X	2	1	X	1	1	1	1	1	1	1	1
	Methyl Formate	Colorless Liquid	1	1	-	-	2	X	X	X	2	2	X	X	X	-	-	-	-	1	1	1	1	1	1	1
	Methyl Hexanal	-	1	-	-	-	-	1	-	1	-	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-
MINING	Methyl Hexanone (Methyl Isoamyl Ketone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-	-	-
	Methyl Hexyl Ketone	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-	-	-
OILFIELD	Methyl Isoamyl Ketone (Methyl Hexanone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-	-	-
	Methyl Isobutyl Ketone (Mesityl Oxide)	Colorless Oily Liquid	1	1	1	-	2	X	X	X	X	2	X	X	X	-	X	1	1	1	1	1	1	1	1	1
	Methyl Isobutyl Ketone (MIBK)	Colorless Liquid	1	2	-	-	-	X	X	X	X	2	X	X	X	1	X	-	-	-	-	-	-	-	-	-
PETROLEUM	Methyl Isopropyl Ketone	Colorless Liquid	1	2	-	-	2	X	X	X	X	2	X	X	X	1	X	1	1	1	1	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	1	1	1	1	1	1
	Methyl Methacrylate Monomer, Inhibited	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-	-	-
PRESSURE WASH AND WASHDOWN	Methyl Phenol (Cresol)	Liquid above 95°F (35°C)	1	2	-	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	1	1	1	1	2
	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	-	-	-	-	-	-	-	-	-
STEAM	Methyl Salicylate	Yellow to Red Liquid	1	1	-	-	2	2	-	-	2	2	-	-	-	-	-	1	1	1	1	1	1	1	1	1
	Methyl Stearate	Liquid above 99°F (38°C)	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CLAMPS	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	-	-	-	-	-	-	-	-	-	-
COUPLINGS AND FERRULES	Methylallyl Alcohol (Methylallyl Alcohol)	Colorless Liquid	1	-	-	-	-	1	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-
	Methylallyl Chloride	Colorless to Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
HOSE FINDER	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	-	-	-	-	-	-	-	-	-	-	-	-
CHEMICAL RESISTANCE TABLE	Methylaniline	Colorless to Brown Liquid	1	1	1	1	2	X	-	-	X	-	1	2	-	X	X	-	-	-	-	-	-	-	-	-
	Methyldiethanolamine	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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NOTE: Ratings are for the effect on the polymer only!

Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters							
		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
		Chem Master™ Xtreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Methylene Bromide	Clear Liquid	1	-	-	-	-	2	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Methylene Chloride (70°F)	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	Colorless Liquid	1	1	2	X	X	X	X	X	X	2	X	X	X	X	1	1	1	1	1	1	-
Methylene Dichloride	Colorless Liquid	1	1	1	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	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	2	1	-	-
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	-	
Malasses	Brown Liquid	1	1	-	1	1	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	-	
Monothalamine	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	-	
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	-	
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	-	
Nickel Acetate Solution (In Water or Alcohol)	Solution	1	1	1	1	2	-	2	2	-	1	-	-	-	-	-	1	1	1	1	-	

AGRICULTURE
AIR BREATHING
AIR DUCT
AIR AND MULTI-PURPOSE
CHEMICAL
FOOD AND BEVERAGE
ENGINE AND MARINE
MATERIAL HANDLING
MINING
OILFIELD
PETROLEUM
PRESSURE WASH AND WASHDOWN
STEAM
WATER
CLAMPS
COUPLINGS AND FERRULES
HOSE FINDER
CHEMICAL RESISTANCE TABLE

		Gates Hose / Polymers																	
Chemical	Form (at room temperature unless otherwise stated)	T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G			
		FEP	Garlon™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC			



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Table with columns for Chemical, Form, and various polymer types (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) under the heading 'Gates Hose / Polymers' and 'Couplings / Adapters'.

Table with one column labeled 'AGRICUL' and multiple empty rows.

CHEMICAL RESISTANCE TABLE



AGRICULTURE	Contact Denver Product Application for recommendations for chemicals not listed. Phone: (303) 744-5070 email: fppasupport@gates.com		Gates Hose / Polymers													Couplings / Adapters								
	AIR BREATHING	1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data	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	
AIR DUCT	AIR AND MULTI-PURPOSE	Chemical	Form (at room temperature unless otherwise stated)	FEP	Gator™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
CHEMICAL	Paraffin (Aliphatic Hydrocarbon)	Varies from Gas to	1	1	1	X	X	1	X	X	2	X	1	X	1	-	-	2	1	1	1	1	1	-
FOOD AND BEVERAGE	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	-	-	-	-	-	-	-	-	-	-
ENGINE AND MARINE	Peanut Oil	Yellow to Green Liquid	1	1	-	2	-	1	-	-	2	X	-	-	-	-	-	2	1	1	1	1	1	1
	Pelargonic Acid	Colorless to Yellow Oil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachloroethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
MATERIAL HANDLING	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	-	-	-	-	-	-	-	-	-
MINING	Pentanone (Methyl Propyl Ketone)	Water White Liquid	1	-	-	-	2	X	-	X	X	2	X	X	X	-	-	X	-	-	-	-	-	-
	Pentasil (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
OILFIELD	Perchloroethylene	Colorless Liquid	1	2	1	X	X	X	X	X	X	X	1	X	2	2	X	1	1	1	-	-	X	-
	Petroleum Coke	Solid Pellets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Petroleum Distillate	Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
PETROLEUM	Petroleum Ether (Naptha)	Liquid	1	1	-	X	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-	-
	Petroleum Naptha (Toluene/Cyclohexane/Xylene)	Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X	-	-	-	-	-	-
	Petroleum Naptha Flash Point Over 200°	Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
PRESSURE WASH AND WASHDOWN	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	-	-	-	-	-	-	-	-	-	-	-
STEAM	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	-	-	-	-	-	-	-	-
WATER	Phenolsulfonic Acid	Yellow to Brown Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	Phenothiazine	Greenish Powder or Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CLAMPS	Phenyl Acetate	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenyl Chloride (Chlorobenzene)	Clear Volatile Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	X	1	1	1	1	1	X
	Phenylenediamine (ortho)	Colorless to Red Solid Needles	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COUPLINGS AND FERRULES	Phorane (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	-	-	-	-	-	-	-	-
	Phosphate Ester Hydraulic Fluid	Liquid	1	1	1	-	1	X	X	X	X	2	-	X	-	2	-	-	-	1	1	1	-	-
HOSE FINDER	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	2	2	2	2	2	2	1	1	1	X	X	X	2	2	X	X	2	1
	Phosphoric Acid (75%)	Colorless Liquid	1	2	1	2	2	-	-	-	-	-	1	1	1	X	X	X	2	2	X	X	1	1
	Phosphoric Acid (85%)	Syrupy Liquid	1	2	1	2	2	X	X	X	X	X	1	1	1	X	X	X	2	2	X	X	1	1
CHEMICAL RESISTANCE TABLE	Phosphoric Acid (90%)	Syrupy Liquid	1	2	1	2	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-

Chemical
Form
(at room temperature
unless
otherwise stated)

FFP
T

Gaio
K

L

S

P

C

D

D

A

H

V

M

J

Z

G

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AGRICULTURE	Form (at room temperature unless otherwise stated)		Gates Hose / Polymers														Couplings / Adapters						
			Chem Master™ X-Treme™ 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	Chemical	Form	FEP	Galton™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon™	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
	Potassium Cuprocyanide	White Crystalline Solid	1	-	-	-	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	-	-	-	-	-	-
	Potassium Ferricyanide	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	1	X	1	-	2	2	-	-	-	-	-	-
	Potassium Hydroxide (45% Caustic Potash)	Colorless to Cloudy Liquid	1	1	1	1	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	-	-	-	-	-	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 (Aq 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	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
	Propyl Chloride	Colorless Liquid	1	-	-	-	X	X	X	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	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	-	X	1	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	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	-	-	-

Treme® FEP

Chem Master™ Plus XL PE

Chem Master™ Plus UHMWPE

Food & Beverage Master

CHEMICAL RESISTANCE TABLE



AGRICULTURE
AIR BREATHING
AIR DUCT
AIR AND MULTI-PURPOSE
CHEMICAL
FOOD AND BEVERAGE
ENGINE AND MARINE
MATERIAL HANDLING
MINING
OILFIELD
PETROLEUM
PRE

Chemical	Form	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Sodium Carbonate (Soda Ash)	Grayish Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
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	-	-	-	-	-
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	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 Fluoride (70%)	White Solid	1	2	-	-	1	2	2	2	2	2	2	2	-	2	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 72°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	2	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	Gray 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	1	2	2	2	2



CHEMICAL RESISTANCE TABLE

Contact Denver Product Appli or recommendations for
chemicals not listed.
Phone: (303) 744-5070
email: fpasupport@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!

Chemical	Form (at room temperature unless otherwise stated)	Gates Hose / Polymers													Couplings / Adapters							
		Chem Master™ T	Chem Master™ K	Chem Master™ L	Chem Master™ S	Chem Master™ P	Chem Master™ C	Chem Master™ D	Chem Master™ D	Chem Master™ A	Chem Master™ H	Chem Master™ V	Chem Master™ M	Chem Master™ J	Chem Master™ Z	Chem Master™ G	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
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	-	-	-	-	-	-	-	-	-
Sodium Thiosulfate (HPD)	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	X	X	1	X	X	X	2	X	-	-	-	X	-
Stannic Sulfide	Yellow to Brown Powder	1	2	-	-	-	2	-	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
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	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	1	-	-
Sugar, Liquid, Blended	Liquid	1	1	-	1	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-
Sugar, Syrup	Liquid	1	1	-	1	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-

AGRICULTURE
AIR BREATHING
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PETROLEUM
PRESSURE WASH AND WASHDOWN
STEAM
WATER
CLAMPS
COUPLINGS AND FERRULES
HOSE FINDER
CHEMICAL RESISTANCE TABLE

Chemical
Form
(at room temperature
unless
otherwise stated)

T
FED

K
Gato

L

S

P

C

D

D

A

H

V

M

J

Z

G

Chemical
Form
(at room temperature
unless
otherwise stated)

FFP
T

Gaio
K

L

S

P

C

D

D

A

H

V

M

J

Z

G