

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon®	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro.
		1	2	2	X	1	X	X	2	X	1	2	1	1	-	-	-	-	-	1	-
Absorption Oil	Liquid	1	2	2	X	1	X	X	2	X	1	2	1	1	-	-	-	-	-	1	-
Acetal	Colorless Liquid	1	1	1	1	-	-	-	-	1	X	-	1	-	-	-	-	-	-	1	-
Acetaldehyde	Colorless Liquid	1	1	1	1	X	2	2	X	1	X	X	1	2	X	1	1	1	1	1	1
Acetamide	Liquid above 176°F(80°C)	1	1	2	2	2	X	X	2	2	X	-	1	-	-	-	2	-	1	X	-
Acetic Acid (40% or less)	Clear Colorless Liquid	1	1	1	1	X	2	X	2	1	X	2	1	-	-	X	2	2	2	X	2
Acetic Acid (56% or less)	Clear Colorless Liquid	1	1	1	1	X	2	X	2	1	X	2	1	X	2	X	2	2	2	X	2
Acetic Acid (85% or less)	Clear Colorless Liquid	1	1	1	2	X	2	X	X	X	X	X	X	X	X	-	2	2	-	-	X
Acetic Acid (Glacial - 99.4%)	Clear Colorless Liquid	1	1	X	X	X	2	X	X	X	X	X	1	X	X	-	2	2	-	-	X
Acetic Acid, Anhydride	Clear Colorless Liquid	1	-	X	-	X	X	X	X	2	-	2	1	X	X	-	2	2	-	-	X
Acetic Anhydride (Acetic Oxide)	Colorless Liquid	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetic Ether (Ethyl Acetate)	Colorless Liquid	1	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	2
Acetic Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	-	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetone (Dimethylketone)	Colorless Liquid	1	1	X	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2
Acetone Cyanohydrin	Colorless Liquid	1	1	2	2	-	X	X	-	2	-	-	2	-	-	-	-	-	-	-	-
Acetonitrile (Methyl Cyanide)	Colorless Liquid	1	1	2	X	X	2	2	2	2	-	2	1	-	1	-	-	-	-	-	-
Acetophenone	Colorless Liquid	1	2	2	1	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-	2
Acetyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acetyl Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetyl-P-Toluidine (In Ether or Alcohols)	In Alcohol or Ether	1	1	1	1	-	X	X	-	2	X	-	1	-	-	-	-	-	-	-	-
Acetylene	Gas	NO HOSE AVAILABLE														-	-	-	-	-	-
Acetylene Dichloride (Dichloroethylene)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	X
Acetylene Tetrachloride (Tetrachloroethane)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	-
Acrolein (Hydroquinone Inhibited)	Colorless to Yellow Liquid	1	1	1	X	-	-	-	-	2	X	-	-	-	-	-	-	-	-	-	-
Acrylamide	Colorless Crystals	1	1	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylates (HEA or HPA)	Colorless Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Acrylic Acid	Colorless Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	Colorless Liquid	1	2	2	X	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Adipic Acid (70°F)	White Crystals	1	1	X	1	X	X	1	X	-	1	-	-	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	2	X	1	1	1	1	1	X	2	1	1	1	1	1	1
Air, 257°F (125°C)	Colorless Gas	1	1	X	1	X	X	X	2	1	1	1	1	X	X	-	-	-	-	-	-
Air, 300°F(149°C)	Colorless Gas	1	1	X	1	X	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	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	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	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha Picoline	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alum (Aluminum Sulphate or Other)	White Crystals	1	1	-	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Alum, Potash (Aluminum Potassium Sulfate)	White Crystals	1	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	2	X	X	1
Alumina - Calcined (Conveyed Pneumatically)	Granular	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro
		NOTE: Ratings are for the affect on the polymer only!																			
CHEMICAL																					
Alumina Trihydrate (Conveyed Pneumatically)	White Crystalline Powder	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum Acetate	White Powder	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1	-	X	-
Aluminum Alkyl (ie Triethylaluminum)	Colorless Liquid	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	-	-	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	-	-	-	-	-	-	-	
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	X	X	-	1	1	-	1	-	-	-	-	-	-	-	
Aluminum Hydroxide (Alumina Trihydrate)	In Mineral Acid or Caustic Soda	1	1	1	-	X	X	X	1	1	1	-	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	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	-	-	-	-	-	-	X	X	2	X	X	1
Aluminum Sulfate Solution	In Water	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	X	X	2	X	X	1
Amines (A class of Organic Compounds)	Varies	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Aromatic - IE P-Toluidine)	White Plates (Solid)	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Mixed)	Varies	1	2	-	2	2	2	2	2	2	X	-	-	-	-	-	1	-	X	X	-
Amines (Primary, Secondary, Tertiary, Etc)	Varies	1	2	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Aminodiphenylamine	Purple Powder	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aminoethanol (Ethanolamine)	Colorless Viscous Liquid	1	2	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Aminoethylethanolamine	Liquid	1	2	1	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	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	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	-	-	-	-	-	-	-	-
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 Flouride	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Hydroxide (16%, 20%, 26%, & 30%)	Colorless Liquid	1	1	1	-	-	-	-	-	-	2	-	-	-	-	2	1	1	-	X	1
Ammonium Hydroxide (up to 30% NH3)	Colorless Liquid	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,or33.5% 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	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
Ammonium Phosphate Solutions	Liquid	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% or less)	In Water	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	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	1

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS						
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop	
		NOTE: Ratings are for the affect on the polymer only!																				
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	2	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	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	X	-	-	-	-	-	-	-	-	-	
Amylbenzene (sec amylbenzene)	Clear Liquid	1	2	2	X	2	X	X	2	X	1	-	-	-	-	-	-	-	-	-	-	
Anethole (anise camphor)	White Crystals/Liquid > 73°F(23°C)	1	2	-	-	X	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	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1	
Aniline Dyes	-	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	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	1	1	X	1	X	X	2	X	1	X	1	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	-	-	-	-	-	-	-	-	-	
Animal Oils	Solid to Liquid	1	-	-	-	1	-	-	2	-	-	-	1	1	1	1	1	1	1	-	-	
Ant Oil (Furfural)	Colorless to Reddish Brown Liquid	1	1	-	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	
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)(30%)	Colorless Liquid	1	1	1	1	2	2	2	2	2	2	1	1	X	X	2	1	1	-	X	1	
Aqua Regia (Nitrohydrochloric Acid)	Fuming Yellow Liquid	1	2	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	2	X	X	X	X	1	X	X	1	X	1	1	1	2	2	-	
Arsenic Acid	In Water	1	1	1	2	-	X	X	-	2	1	-	1	-	-	2	-	1	2	-	2	
Arsenic Trioxide	In Acid	1	1	1	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	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	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	2	X	X	-	X	1	X	-	2	X	-	-	-	-	-	-	
Asphaltene	In Carbon Disulfide	1	2	X	X	2	X	X	2	X	1	X	X	1	-	-	-	-	-	-	-	
ASTM Oil No. 1	Brown Liquid	1	1	1	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	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	1	X	X	X	X	1	X	1	1	X	1	1	1	1	1	X	
ASTM Reference Fuel A	Liquid	1	1	1	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	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	2	X	X	X	X	1	X	2	1	X	1	1	1	-	1	X	
ATF (Automatic Transmission Oil)	Liquid	1	1	1	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	-	-	-	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	X	-	1	2	1	1	-	1	1	
Barium Chloride	Colorless Crystals	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	1	-	X	2	1	1	-	1	
Barium Sulfate	White to Yellowish Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	1	-	2	
Barium Sulfide	Yellowish Green to Gray Powder	1	1	1	-	-	-	1	-	-	1	-	-	-	-	X	1	1	-	X	1	

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro.
CHEMICAL																					
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beet Sugar Liquors	Colorless Solution	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 Liquid	1	1	1	2	X	X	X	X	2	X	X	2	2	X	1	-	-	1	-	1
Benzene (Benzol)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	1	X	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	2	X	X	X	X	2	1	2	1	-	X	-	-	-	-	-	-
Benzoic Aldehyde (Benzaldehyde)	Colorless to Yellow Liquid	1	1	1	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	X
Benzophenone	White Powder	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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	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	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Blast Furnace Gas (Cooled)	Gas	1	1	-	-	X	X	X	X	X	1	X	-	-	X	1	1	1	-	1	-
Bleach (Chlorinated Lime)	White Powder (35-37% Cl)	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bleach Liquor (Calcium Hypochlorite/H2O)	Clear Solution	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	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	X	1	X	2	1	1	X	1
Boric Oxide	Colorless Powder	1	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Brake Fluid (Petroleum Base)	Liquid	1	1	-	X	1	X	X	2	X	1	X	1	1	2	1	1	1	-	1	X
Brake Fluid (Synthetic Base)	Liquid	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	2	1	1	-	2	1
Bromine	Dark Reddish Brown Liquid	1	-	-	X	X	-	-	X	-	1	-	-	X	X	1	1	1	1	1	-
Bromobenzene	Colorless Liquid	1	-	-	X	-	X	X	-	X	1	-	-	-	X	-	-	-	-	-	-
Bromochloroethane	Colorless Liquid	-	-	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	1	1	1	-	1	X
Bromotoluene	Clear Liquid	1	-	-	X	-	X	X	-	X	1	-	X	-	X	-	-	-	-	-	-
Bubble Bath Compounds	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bunker Oil	Liquid	1	2	2	X	1	X	X	2	X	1	X	-	1	X	1	1	1	1	1	-
Butadiene (1,3)	Gas	1	1	-	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	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	2	1	1	2	1	1	1	1	1	1	1	1	1
Butter	Yellow to white semi-Solid to Liquid	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Butter Oil (Use FDA Hose)	Yellow to white Liquid	1	-	-	-	-	X	X	2	-	-	-	-	-	-	1	1	1	1	1	-
Butyric Acid	Colorless Liquid	1	1	1	2	-	2	2	X	2	1	X	1	X	-	-	-	-	-	-	-
Butyl Carbitol (Diethylene Glycol Butyl Ether)	Colorless Liquid	1	1	-	2	2	X	X	2	2	1	-	1	-	-	1	1	1	1	1	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
		NOTE: Ratings are for the affect on the polymer only!																			
Butyl Cellosolve (EG Monobutyl Ether)	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
Butyl "OxitolM" for EG Monobutyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
Butyl Acetate	Colorless Liquid	1	2	2	X	X	X	X	2	X	X	2	1	1	2	1	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	-	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate (BBP)	Clear Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Butyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
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	1	-	-	-	X	-	1	1	-	-	-
Butyl Methacrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Stearate	Colorless Liquid	1	1	-	X	2	X	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	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	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	-	-	-	-	-	-	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	-	-	-	-	-	-
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	1
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	-	-	-	-	-	-	-	-	-	-
Calcium Carbonate	Solid White Powder	1	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	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	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	1
Calcium Hydroxide (Hydrated or Slaked Lime)	Solid White Powder	1	1	-	-	2	1	1	1	1	X	1	1	-	X	X	X	1	-	2	1
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	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	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	-
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	-	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-
Caliche Liquors (Sodium Nitrate)	In Water	1	1	-	-	1	2	2	-	1	-	1	-	-	-	-	1	1	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
		NOTE: Ratings are for the affect on the polymer only!																			
CHEMICAL																					
Camphene (Liquid above 115°F (46°C))	Liquid above 115°F (46°C)	1	-	-	X	-	-	-	-	1	X	-	-	-	-	-	-	-	-	-	-
Cane Sugar Liquors	In Water	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	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	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	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	-
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	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	2	X
Carbon Monoxide	Gas	1	2	1	1	2	X	X	2	X	1	1	-	-	1	1	1	1	1	1	1
Carbon Tetrachloride (Pyrene)	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	2	1	X	X	2	2	X	2	X
Carbonic Acid	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	-	X	X	1	2	X	1
Carbonyl Chloride (Phosgene)	Gas/ Liquid	1	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	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	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	-	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	-	-	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	-	-	-	-	-	-	-	-
Cement, Portland	Gray Powder	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
China-Wood Oil (Tung Oil)	Yellow Oil	1	2	-	X	2	X	X	X	X	1	2	-	-	2	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 Tetrchloroethane)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-
Chlorine	Gas	NO HOSE AVAILABLE														-	-	-	-	-	-
Chlorine Liquid (Liquid @ 210 PSIG @ 120°F (38°C))	Clear Amber Liquid	1	-	-	X	-	-	-	-	-	1	-	-	X	X	-	-	-	-	-	-
Chlorine Trifluoride	Pale Green Liquid	1	-	-	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Chlorine Water (3% Chlorine)	Clear, yellowish Liquid	1	1	1	X	-	-	-	-	-	1	-	-	-	-	-	X	X	-	-	1
Chloroacetic Acid (Monochloroacetic Acid)	Powder or White Crystals	1	1	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	1	2	-	-	-	-	-	-	-	-	-
Chloroacetic Acid Solution	In Water, Alcohol, Ether	1	1	X	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1
Chloroacetone	Colorless Liquid	-	-	-	1	-	-	-	-	-	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	1	X	X	X	X	1	1	1	1	1	X
Chlorobromomethane (Bromochloromethane)	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	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	1	X	X	X	X	-	-	-	-	-	-
Chloroform	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	2	X	1	1	1	1	1	X
Chloronapthalene (Chlorinated Napthalene)	Oily Liquid to Solid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Chloropentane (n-amyl chloride)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	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	-	-	-	1	-	-	-	-	1
Chlorosulfonic Acid	Colorless to Light Yellow Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro.
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
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	-
Chlorox	Colorless Liquid	1	2	1	-	-	2	2	2	2	-	2	1	1	1	-	2	1	-	-	X
Chocolate Syrup	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Chrome Alum (Chromium Potassium Sulfate)	In Water	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	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	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	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Cinene (Dipentene)	Colorless Liquid	1	2	-	X	X	X	X	-	-	1	-	-	-	-	-	-	-	-	-	-
Citgo FR Fuels	Liquid	1	1	-	1	X	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-
Citric Acid Solution	In Water	1	1	1	2	X	2	2	1	2	1	1	-	X	1	X	X	1	1	X	2
Coal Gas (Coke Oven Gas, Max 120°F (49°C))	Gas	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Coal Tar	Black, viscous Liquid	1	-	-	X	2	X	X	2	X	1	X	2	X	X	1	1	1	1	1	-
Coal Tar Pitch (Roofing)	Liquid above 212°F (100°C)	1	-	-	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	1	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-
Coconut Oil	Liquid above 77°F (25°C)	1	-	-	2	1	X	X	1	2	1	2	-	1	2	-	-	-	-	-	-
Cod Liver Oil	Pale Yellow Liquid	1	1	-	2	X	X	X	X	2	1	X	-	-	-	1	1	1	1	1	-
Coke Oven Gas (300°F (149°C) or less)	Gas	1	1	-	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	1	-	2	2	X	X	2	2	1	X	2	-	1	1	1	1	1	1	X
Corn Syrup (Glucose Syrup)	Clear Liquid	1	2	-	2	2	2	2	2	2	2	2	-	-	-	1	1	1	1	-	-
Cottonseed Oil	Liquid, several colors	1	1	-	2	2	-	-	1	-	1	2	2	-	-	1	1	1	1	1	1
Creosote (high Napthalene/ Anthracene)	Liquid	X	2	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	X	1	X	-	X	-	-	-	-	-	-	-
Crotonic Acid (Methylacrylic Acid)	White Crystalline Solid	1	1	1	2	2	X	X	-	1	1	-	1	X	-	1	X	-	-	-	-
Crude Oil (Crude Petroleum Oil)	Liquid	1	1	-	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 (Greeland 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	-	-	-	-	-	-	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	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE COUPLINGS

ENGINEERING AND TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
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	-	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	2	-	X	-	1	1	2	-	X
Cyclohexylamine	Colorless Liquid	-	-	-	1	-	X	-	-	1	X	-	-	-	-	-	-	-	-	-	-
Cyclopentane	Colorless Liquid	1	-	-	X	2	-	X	2	X	1	X	-	-	-	-	-	-	-	-	-
Cyclopentanol	Colorless Liquid	1	-	-	-	2	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
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	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	-	-	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	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	-
Detergent Sol. (Sodium dodecylbenzenesulfonate)	In Water	1	2	1	1	1	X	X	2	1	-	1	-	-	1	2	1	1	1	1	1
Developing Solutions (Hypos)	Liquid	1	1	-	-	-	2	2	2	2	-	2	-	-	1	-	1	1	-	-	-
Dextron	Brown Liquid	1	X	-	X	1	-	-	-	X	-	-	1	1	2	-	-	-	-	-	-
Dextrin (Starch gum)	Yellow or White Powder	1	1	-	1	1	-	-	1	X	1	-	-	1	1	-	1	1	-	-	1
Diacetone	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	1	1	X	1	1	1	-	1	1
Diacetone Alcohol	Colorless Liquid	1	1	-	-	X	2	2	-	2	X	2	1	-	X	1	1	1	1	1	1
Diammonium Phosphate	In Water	1	1	-	1	1	1	1	1	1	-	1	-	-	1	X	2	1	X	-	1
Diazinon	In Petroleum Solvents	1	-	-	1	-	1	1	-	-	1	-	-	-	2	-	-	-	-	-	2
Dibenzyl Ether	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	-	1	1	1	1	1	-
Dibutyl Ether	Colorless Liquid	1	1	-	-	X	X	X	X	2	X	X	1	-	-	1	1	1	1	1	-
Dibutyl Phthalate	Colorless Oily Liquid	1	1	-	1	X	X	X	X	2	2	X	2	-	1	1	1	1	1	1	2
Dibutylamine	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	X	X	-	X	-	-	-	-	-	-
Dibutylsebacate	Clear Colorless Liquid	1	1	-	X	X	X	X	X	2	1	-	2	-	-	-	-	-	-	1	-
Dichloroacetic Acid	Colorless Liquid	1	-	-	-	X	-	2	-	X	X	X	-	-	-	-	-	-	-	-	-
Dichloroaniline	In Alcohol or Benzene	1	-	-	X	X	X	-	X	X	2	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene (ortho)	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-
Dichlorobenzene (para)	White Crystals	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-
Dichlorobenzyl Chloride	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	-	X	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	Gas, Liquid @ 140 PSIG @ 100°F	SPECIAL HOSE REQUIRED																			
Dichloroethane (Ethylene Dichloride)	Colorless Oily Liquid	1	2	2	X	X	X	X	X	2	X	X	X	X	X	-	-	-	-	-	-
Dichloroethyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	-	X	-	-	-	-	-	-	-	-	-
Dichloroethylene	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	X
Dichloroethylene (Acetylene Dichloride)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	X
Dichloromethane (Methylene Chloride)	Colorless Liquid	1	1	2	X	X	X	X	X	X	2	X	X	X	X	1	1	1	-	1	-
Dichloropentane	Light Yellow Liquid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Dichloropropane (Propylene Dichloride)	Colorless Liquid	1	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Dicyclohexylamine	Colorless Liquid	1	-	-	X	-	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-
DIDA (Diisodecyl Adipate)	Light Colored Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diesel Fuel	Liquid	1	1	1	X	1	X	X	2	X	-	X	-	1	-	1	1	1	1	1	2
Diethanolamine (20%)	In Water or Alcohol	1	-	-	2	2	2	2	X	1	-	2	1	-	2	1	1	1	1	X	-
Diethanolamine	Liquid above 83°F (29°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	X	-
Diethyl Ether (Ethyl Ether)	Colorless Liquid	1	2	-	X	X	X	X	X	2	X	X	1	-	2	2	1	1	1	1	1
Diethyl Ketone	Colorless Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Diethyl Oxalate	Colorless Oily Liquid	1	-	-	X	X	-	X	X	X	-	X	-	-	X	-	-	-	-	-	-
Diethyl Phthalate (Ethyl Phthalate)	Water White Liquid	1	1	-	-	X	X	X	-	2	-	-	2	-	-	-	1	1	-	1	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
Diethyl Sebacate	-	1	1	-	-	X	X	X	X	2	2	X	2	-	-	-	1	1	-	1	-
Diethyl Sulfate	Colorless Liquid	1	-	-	1	X	1	X	1	2	X	X	-	-	-	-	-	-	-	-	-
Diethyl Sulfide (Ethyl Sulfide)	Colorless Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylacetaldehyde (Ethylbutyraldehyde)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylamine	Colorless Liquid	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1
Diethylbenzene	Colorless Liquid	1	1	-	X	-	X	X	-	X	1	-	2	-	-	-	-	-	-	-	-
Diethylene Dioxide (1,4 Dioxane)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Diethylene Ether (Dioxane)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Diethylene Glycol (Dihydroxydiethyl Ether)	Colorless Syrupy Liquid	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1
Diethylene Glycol Methyl Ether (Methyl Cellosolve)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether Acetate	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monoethyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether Acetate	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylenetriamine	Yellow Liquid	1	1	1	1	-	X	-	X	1	X	X	-	-	-	-	-	-	-	-	-
Dihydroxyacetone	In Water	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	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	2	X	X	X	X	1	X	1	-	-	-	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	X	X	X	X	2	X	X	-	1	-	-	1	1	-	1	-
Diisopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisopropylbenzene (meta)	Colorless Liquid	1	2	2	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	-	-	-	-	-	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	X	X	X	X	2	X	X	-	-	-	1	1	1	1	1	1
Dimethyl Formamide	Water White Liquid	1	1	-	2	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethyl Phthalate	Colorless Oily Liquid	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 @ 70 PSIG @ 120°F (49°C)	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminoethanol (Dimethylethanolamine)	Colorless Liquid	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	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	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	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, Solid	In Alcohol or Ether	1	1	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Diocetyl Adipate di (2-ethylhexyl) adipate	Light Colored Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE COUPLINGS

ENGINEERING AND TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
Diocetyl Phosphite, di-(2-ethylhexyl) phosphite	Colorless Liquid	1	1	-	X	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-	-
Diocetyl Phthalate, di-(2-ethylhexyl) phthalate	Light Colored Liquid	1	1	-	X	X	X	X	X	1	X	2	-	-	1	1	1	1	1	1	X
Diocetyl Sebacate, di-(2-ethylhexyl) sebacate	Pale Straw Colored Liquid	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	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxane (Diethylene Ether)	Colorless Liquid	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	-	-	1	-	-	1	-	1	1	1	1	1	-
Diphenyl Phthalate	Yellow White Powder	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropyl Ketone	Colorless Liquid	1	1	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dipropylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol	Colorless Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol Monomethyl Ether (DPM)	Colorless Liquid	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	-	-	-	-	-	-	-	-	-	-
Distillate Fuel Oil	Clear to Brown Liquid	1	2	-	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Divinylbenzene (20-25% or 50-60% Grades)	Water White to Straw Liquid	1	2	-	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	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	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dodecylphenol	Straw Colored Liquid	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	X	X	X	X	X	1	X	2	-	X	1	1	1	1	1	-
Dowtherm SR-1 (Ethylene Glycol)	Liquid	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duro Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	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	-	-	-	-	-	-	-	-	-	-
Enamels	Liquid	1	1	-	X	-	-	-	-	-	1	-	-	1	2	-	-	-	-	1	-
Epichlorohydrin (Chloropropylene Oxide)	Volatile Liquid	1	2	-	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	1
Epoxy Resin	Solid Pellet	-	-	-	1	-	-	-	1	2	X	-	-	-	-	-	-	-	-	-	-
Essential Oils	Liquid	1	2	-	X	1	X	X	2	-	1	-	-	-	2	1	1	1	1	1	-
Ethanol (Ethyl Alcohol)	Colorless Liquid	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	-
Ethers	Liquids	1	1	X	1	2	X	X	X	2	X	2	1	-	2	1	1	1	1	1	2
Ethyl Acetate (Acetic Ether)	Colorless Liquid	1	1	X	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	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X
Ethyl Acrylate, Inhibited	Colorless Liquid	1	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	2	1	1	1	1	2	1
Ethyl Aluminum Dichloride 90°F (32°C)	Clear Yellow Liquid	1	-	-	-	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	X	1	X	-	-	X	2	1	1	1	2	X

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																					
Ethyl Chloroformate (Ethyl Chlorocarbonate)	Water White Liquid	1	-	-	X	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethyl Ether (Diethyl Ether)	Colorless Liquid	1	2	X	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	-	-	-	-	-	-	-	-	-	-
Ethyl Iodide	Colorless Liquid	1	-	-	X	X	-	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Ethyl Isobutyrate	Colorless Liquid	1	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-
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	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	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	-	1	-
Ethylbutanol (2-Ethylbutyl Alcohol)	Colorless Liquid	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	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	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	-	1	-
Ethylene Chlorohydrin	Colorless Liquid	1	1	-	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	2	X	X	X	X	-	-	-	-	-	-
Ethylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	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	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monoethylether Acetate	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	2	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol N-Butyl Ether	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylenediamine	Colorless Liquid	1	2	-	2	1	-	-	-	2	X	-	-	-	-	1	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	-	-	-	-	-	-
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	-	-	X	-	-	-	-	X	-	-	-	X	-	-	-	-	-	-
Ethylhexyl Alcohol (Ethylhexanol)	Colorless Liquid	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	-
F																					
Fatty Acid	Solid, Semisolid or Liquid	1	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	-	-	-	-	-	-
Fatty Petroleum Alcohol	C11 or Less are Liquids	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	2	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	1	1	-	-	1
Ferric Nitrate Solution	Liquid	1	-	-	1	1	-	1	1	1	1	1	-	1	-	X	1	1	-	-	1

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE COUPLINGS

ENGINEERING AND TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data																					
NOTE: Ratings are for the affect on the polymer only!																					
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	X	-
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	-	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	2	1	1	1	1	1	1
Finishing Oil	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire-Resistance 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	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	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	X	-	X	X	-	-	-	-	-	1	-	-	X	1	-	-	-	-	-	-
Fluorine (Liquid)	Yellow Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-
Fluosilicic Acid (50%)	Colorless Liquid	1	1	1	2	X	-	-	2	X	-	2	1	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	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	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	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	-	-	-	-	-	-	-
Fuel Oil (ASTM 1-6)	Water White to Brown Liquids	1	2	1	X	1	X	X	2	X	1	X	1	1	X	2	2	2	1	1	-
Fumaric Acid	Colorless Crystals	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	-	-	-
Furan (Furfuran)	Colorless to Brown Liquid	1	1	1	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	-
Furfural (Ant Oil)	Colorless to Reddish Brown Liquid	1	1	-	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	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	-
Furfuryl Alcohol	Colorless to Reddish Brown Liquid	1	1	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
Fusel Oil (Amyl Alcohol, Grain Oil)	Colorless Liquid	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	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Gallic Acid Solution	In Alcohol Solution	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	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	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	2	X	X	2	X	1	X	1	1	X	2	1	1	1	1	-
Gasoline (White) ¹	Colorless Liquid	1	2	-	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
Gelatin	Flakes or Powder	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-
Glacial Acetic Acid	Clear Colorless Liquid	1	1	1	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	-	-	-	-	-	-	-	-	-
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	-
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	2	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	-
Glycerol Monolaurate	Liquid above 80°F (27°C)	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	-
GMAA (Glacial Methacrylic Acid)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite	Powdered, Flake, Crystals	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Grease	Semi-Solid	1	1	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	-	-	-
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	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
HEA Acid (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hematite (Iron Ore)	Black to Brick Red	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
HEP (2-Hydroxypropyl Acrylate)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Heptachlor (In Xylene)	Liquid	1	2	-	X	2	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Heptanal (Heptaldehyde)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptane	Colorless Liquid	1	2	1	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	1	1	-	-	-	-	-	-
Hexachlorocyclohexane	White to Yellowish Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	Yellow Liquid	1	-	-	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	-
Hexamethylenediamine, Solution	Colorless Flat Solid Leaflets	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexamethyleneimine	Clear Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexane	Colorless Liquid	1	X	1	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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexylamine	Water White Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Hexylene (1-Hexene)	Colorless Liquid	1	-	-	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexylene Glycol	Colorless Liquid	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	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE COUPLINGS

ENGINEERING AND TECHNICAL DATA

1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!	CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
			Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
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	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	1	-	-	-	-	-	-	-	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 (Polyalphaolfin)	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	X	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	-	
Hydrobromic Acid (to 48%)	Colorless to Yellow Liquid	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	2	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-	
Hydrochloric Acid (37%)	Colorless to Yellow Liquid	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	-	
Hydrocyanic Acid (10% Solution with water)	Water White Liquid	1	1	1	-	X	2	2	X	-	1	2	-	-	X	X	1	1	1	X	-	
Hydrocyanic Acid (98% or less)	Water White Liquid below 77°F/25°C	1	-	-	-	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-	
Hydrocyanic Acid (up to 20%)	Water White Liquid	1	1	-	1	2	2	2	2	-	1	1	-	-	2	-	-	-	-	-	-	
Hydrofluoric Acid (38% or less)	Colorless Liquid	1	1	1	2	X	X	X	2	2	1	1	1	X	X	X	X	X	X	X	-	
Hydrofluoric Acid (47% or less)	Colorless Liquid	1	1	1	2	X	X	X	2	2	1	2	1	X	X	X	X	X	X	X	-	
Hydrofluoric Acid (53 % or less)	Colorless Liquid	1	1	X	-	X	X	X	2	X	1	2	1	X	X	X	X	X	X	X	-	
Hydrofluoric Acid (70%)	Colorless Liquid	1	1	X	X	X	X	X	X	-	1	2	-	X	X	X	X	X	X	X	-	
Hydrofluoric Acid (Concentrated)	Colorless Liquid	1	1	X	X	X	X	X	X	X	2	2	1	X	X	X	X	X	X	X	-	
Hydrofluosilicic Acid	In Water	1	1	1	2	X	X	X	X	X	1	1	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	-	-	-	-	-	-	-	-	-	-	
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	1	2	X	X	1	X	1	1	1	1	1	X	2	1	1	X	-	
Hydrogen Peroxide (50% or less)	Liquid	1	2	1	1	2	X	X	1	X	1	1	1	2	2	X	2	1	1	X	-	
Hydrogen Peroxide (70% or less)	Liquid	1	2	1	2	X	X	X	2	-	1	1	1	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	2	1	1	X	-	
Hydrogen Sulfide	Colorless Gas	NO HOSE AVAILABLE														-	-	-	-	-	-	
Hydrogen Sulfide, Liquified	Liquid @ 410 PSI, 120°F (49°C)	1	-	-	1	X	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-	
Hydrolube (Water Glycol)	Liquid	1	-	1	1	1	-	-	2	2	1	-	-	-	1	-	-	-	-	-	-	
Hydrolubric Oil (Houghton)	Liquid	1	1	-	X	2	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-	
Hydroquinone	White Crystals	1	1	-	X	-	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	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate (HEA)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate Acid (HEA Acid)	Liquid	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	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	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	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	-	-	-	-	-	-	-	-	-	-
Iodine, In Alcohol	Liquid	1	1	1	1	-	X	X	2	-	1	-	1	-	1	-	-	-	-	-	-
Iron Acetate Liquor (Black Liquor)	Black Liquid	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	-	-	-	-	-	-	-	-	-
Isoamyl Bromide	-	1	-	-	X	X	-	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Isoamyl Butyrate	Water White Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Chloride	Colorless to Yellow Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isoamyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Phthalate	Colorless Liquid	1	-	-	-	X	-	X	-	2	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	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	-	-	-	-	-	-	-	-	-
Isobutyl Alcohol (Isobutanol)	Colorless Liquid	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	-	-	-	-	-	-	-	-	-
Isobutyl Carbinol (Primary Isoamyl Alcohol)	Colorless Liquid	1	-	-	2	2	-	2	2	2	2	2	-	-	-	-	-	-	-	-	-
Isobutylamine	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
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	-	X	X	X	X	X	X	1	-	-	-	-	1	1	1	-	-	-
Isooctane	Colorless Liquid	1	2	-	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	-	-	-	-	-	-	-	-	-	-
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	2	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	2	X	X	X	X	2	-	X	-	1	X	1	1	1	1	1	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																					
Isopropyl Alcohol (Isopropanol)	Colorless Liquid	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropyl Benzene (Cumene)	Colorless Liquid	1	2	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-
Isopropyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Isopropyl Ether	Colorless Liquid	1	1	1	X	X	X	X	X	2	X	X	-	1	X	1	1	1	1	1	-
Isopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	Colorless Liquid	1	2	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-
Isopropyltoluene (Cymene)	Colorless Liquid	1	-	-	-	-	-	-	-	1	-	-	1	-	1	1	1	1	1	1	-
J																					
Jet Fuel A and A1 ²	Liquid	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Jet Fuel JP1 ²	Liquid	1	1	-	X	1	X	X	2	X	1	X	-	1	X	-	-	-	-	-	-
Jet Fuel JP10 (Tetrahydroxydicyclopentadiene) ²	Liquid	1	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Jet Fuel JP4 ²	Liquid	1	1	-	X	1	X	X	2	X	1	X	-	1	X	2	1	1	2	1	-
Jet Fuel JP5 ²	Liquid	1	1	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	2	1	-
Jet Fuel JP8 ²	Liquid	1	1	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	2	1	-
K																					
Kaolin Clay	White to Yellowish Powder	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Karo Syrup	Yellow Liquid	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	-	-	-
Kerosene	Water White Oily Liquid	1	1	-	X	1	X	X	X	X	1	X	1	1	2	1	1	1	1	1	-
Ketchup	Red Liquid	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-	1	1	-	-	-
Ketoglutaric Acid	In Water or Alcohol	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ketones (ie Acetone, MEK, Cyclohexanone)	Generally Liquids	1	1	1	2	X	X	X	X	2	X	X	-	1	X	1	1	1	1	1	-
Koch Acid	White Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
L																					
Lacquer - Alcohol or Acetate as Solvent	Solution	1	1	1	2	-	-	-	-	-	X	-	-	-	-	X	X	1	1	1	-
Lacquer - Toluene or Xylene as Solvent	Solution	1	-	-	-	X	X	X	X	X	1	X	-	1	X	X	X	1	1	1	-
Lactic Acid (90% or less)	Colorless-Yellow Liquid	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	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	2	1	-	-	1	-	1	1	-	X	1	X	2	1	X	2	-
Lactic Acid, USP 85-90% or less	Colorless to Yellow Syrupy Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	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	2	2	-	2	1	-	-	1	1	1	1	1	1	1	-
Lauryl Peroxide	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauryl Alcohol	Liquid above 75°F (24°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Lead Acetate	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	1	1	-	1	-
Lead Acetate Solution	Solution	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	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	2	X	X	X	1	X	1	2	-	-	2	2	1	1	X	X	-
Lime, Chlorinated (Bleaching Solution)	Solution	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 (Calcined Limestone)	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyurethane
		NOTE: Ratings are for the affect on the polymer only!																			
Lime, Slaked (Calcium Hydroxide)	White Crystalline Powder	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Limestone	Powder or Lumps	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Limonene	Colorless Liquid	1	2	1	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 Oil	Yellow Amber to Brown Liquid	1	1	X	2	2	X	X	2	-	1	1	1	1	1	2	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	-	-	-	-	-	
Magnesium Carbonate	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	
Magnesium Carbonate Solution (in Acid)	Liquid Solution	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	1	1	-	-	
Magnesium Chloride	Colorless to White Crystals	1	-	1	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	2	
Magnesium Chloride Brine	Solution	1	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	
Magnesium Chloride, Hydrated (in H2O or Alcohol)	Solution	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	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	2	1	1	1	1	-	1	2	1	1	-	1	
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														2	2	1	-	-	
Maleic Acid Solution	Solution	1	1	1	1	2	2	2	X	-	7	-	-	-	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	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Malt Extract (Maltine)	Light Brown Viscous Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Malt, Dry	Yellow to Amber Grain	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
Maltine (Malt Extract)	Light Brown Viscous Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Manganese Salts	-	1	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 20B-HB HOSE ONLY														-	-	-	-	-	-
Maxmul (Penzoil Hydraulic Fluid)	Liquid	1	-	-	-	1	-	-	2	-	-	-	-	-	-	1	-	1	-	-	
Mayonnaise	Semi-Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
MBK (Methyl Butyl Ketone)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	
MEA (Ethanolamine)	Colorless Viscous Liquid	1	1	1	2	2	2	2	2	1	X	X	1	-	2	-	-	-	-	-	
MEK (Ethyl Methyl Ketone)	Colorless Liquid	1	2	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE COUPLINGS

ENGINEERING AND TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																			
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														1	1	1	-	-	-
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 (Aluminium, 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	-	-	-	-	-	-	-	-	-
Methane	Gas	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methanol (Methyl Alcohol)	Colorless Liquid	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	-	-	-
Methyamine (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	-
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	X	X	X	X	X	X	X	-	-	-	1	1	1	1	1	-
Methyl Acrylate Acid(Methylacrylic Acid)	White Solid	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-	-
Methyl Alcohol (100%) (Methanol)	Colorless Liquid	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	-
Methyl Bromoacetate	Colorless to Straw Colored Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Butanathiol (Butyl Mercaptan)	Liquid	1	1	-	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	-	-	-	-	-	-
Methyl Butyl Ketone (MBK)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Methyl Carbitol (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Cellosolve (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Chloride	Liquid @ 160 PSIG @ 120°F (49°C)	1	2	-	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	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	2	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Methyl Cyclohexane	Colorless Liquid	1	-	-	X	1	X	X	-	X	1	X	2	1	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	Colorless Liquid	1	2	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	2	-	X	1	1	1	1	1	-
Methyl Isobutyl Ketone (MIBK)	Colorless Liquid	1	2	-	-	X	X	X	X	2	X	X	2	1	X	-	-	-	-	-	-
Methyl Isopropyl Ketone	Colorless Liquid	1	2	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-
Methyl Methacrylate	Colorless Liquid	1	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	-	2
Methyl Propyl Carbinol (2 Pentanol)	Colorless Liquid	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	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS						
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
		1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																				
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 @ 20°C	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Methylacrylic Acid (Crotonic Acid)	White Crystalline Solid	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 @ 49°C	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
Methylamyl Acetate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methylamyl Alcohol	Colorless Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Methylaniline	Colorless to Brown Liquid	1	1	1	2	X	-	-	X	-	1	2	-	X	X	-	-	-	-	-	-	
Methyldiethanolamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methylene Bromide	Clear Liquid	1	-	-	-	2	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-	
Methylene Chloride (Dichloromethane)	Colorless Liquid	1	1	2	X	X	X	X	X	X	2	X	X	X	X	1	1	1	1	1	-	
Methylene Dichloride	Colorless Liquid	1	1	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	X	1	-	
Methylene Dichloride (Methylene Chloride)	Colorless Liquid	1	1	2	X	X	X	X	X	X	1	X	X	X	X	1	1	1	X	1	-	
Methylene Diphenyl Diisocyanate, MDI	Liquid above 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	1	X	X	1	X	1	1	1	1	1	1	1	1	2	1	-	
Mineral Spirits (VM&P Naphtha)	Colorless Liquid	1	1	-	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	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	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	2	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	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-	
Monoethylamine Solution (70% or less)	Liquid Solution	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Monoglycerides	Liquid to Solid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Monomethylamine (Methylamine)	Liquid @ 120 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	X	1	1	1	-	-	-	
Monopentaerythritol (Pentaerythritol)	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Monopentaerythritol Solution	Liquid Solution	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	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	-	
MTBE (Methyl Tertiary Butyl Ether)	Colorless Liquid	-	2	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	
Muriatic Acid (Hydrochloric)	Colorless to Yellow Liquid	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-	
Mustard	Liquid	1	-	-	-	-	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	1	X	X	-	X	1	X	1	1	X	-	-	-	-	-	-	
Naphtha (Low Aromatic Content)	Liquid	1	1	-	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-	
Naphthalene	White Crystalline Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-	

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
		NOTE: Ratings are for the affect on the polymer only!																			
Naphthenic Acid	Commercial Grade is Dark Fluid	1	1	-	-	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	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	X	1	1	X	X	-
Niter Cake Solution	Solution	1	1	1	2	-	X	X	-	2	1	1	1	-	-	-	-	-	-	-	-
Nitric Acid (25% or less)	Colorless Liquid	1	1	1	2	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (10%)	Transparent or Yellowish Liquid	1	1	1	1	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (25%)	Transparent or Yellowish Liquid	1	1	1	2	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (35% or less, 26 Degrees Baume)	Colorless Liquid	1	1	1	2	X	X	X	X	2	1	1	X	X	X	X	2	2	-	X	-
Nitric Acid (52% or less, 36 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	1	2	X	X	X	X	X	2	2	-	X	-
Nitric Acid (61% or less, 40 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	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	1	X	X	X	X	X	X	2	2	-	X	-
Nitric Acid (67% or less, 42 Degrees Baume)	Colorless to Yellow Liquid	1	X	X	X	X	X	X	X	1	X	X	X	X	X	X	2	2	-	X	-
Nitric Acid (95% or less, 48.5 Degrees Baume)	Yellow Liquid	1	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	1	X	X	X	X	X	-	-	-	-	-	-
Nitrobenzene	Yellow Liquid @ 43°F (6°C)	1	2	-	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	1	-	-	-	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	-
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	-	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	-	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	-	-	-	-	-	-	-	-	-	-
Nonylene (Nonene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
0																					
Octadecanoic Acid (Stearic Acid)	Colorless Waxy Solid	1	1	1	2	2	2	2	2	2	1	2	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	2	-
Octyl Aldehyde	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS						
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro.	
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																						
Octyl Carbinol (Nonyl Alcohol)	Colorless Liquid	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	1	X	X	2	X	1	2	1	1	2	-	-	-	-	-	-	
Oil of Turpentine	Liquid	1	2	2	X	1	X	X	2	X	1	X	-	1	1	-	-	-	-	-	-	
Oils, Animal (High Fatty Acid Content)	Solid to Liquids	1	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	2	X	X	X	X	1	2	2	1	X	-	-	-	-	-	2	
Oils, Vegetable (Soybean, Coconut, Corn)	Liquids	1	1	-	X	1	X	X	-	X	1	X	-	1	-	-	-	-	-	-	1	
Oleic Acid (fatty acid)	Yellow to Red Oily Liquid	1	2	2	2	X	X	X	2	2	2	X	2	-	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	-	-	1	-	-	X	
Olive Oil	Yellow to Green Liquid	1	1	1	2	2	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	2	1	2	X	1	
Oxalic Acid (50%)	Crystals in H2O	1	2	1	2	X	X	X	X	2	1	2	1	X	X	-	-	-	-	-	-	
Oxygen	Colorless Gas	1	1	-	1	2	2	2	-	1	1	1	1	-	-	-	-	-	-	-	-	
Oxygen, Refrigerated Liquid	Liquid @ 200 PSIG @ -146°C	NO HOSE AVAILABLE															-	-	-	-	-	-
Ozone	Gas	1	2	2	1	X	X	X	2	2	2	2	1	2	1	1	1	1	1	1	1	
P																						
Paint (Emulsion or Latex)	Liquid	1	1	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	
Paint (Inorganic)	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-	
Paint (Oil or Solvent Based)	Liquid or Paste	1	1	-	X	2	X	X	-	X	1	X	-	1	-	-	-	-	-	-	-	
Paint Remover	Liquid or Paste	1	2	-	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	-	
Palmitic Acid (Hexadecanoic Acid)	Crystals in Hot Alcohols	1	1	1	2	2	X	X	2	2	1	X	1	-	-	1	2	1	1	X	1	
Papemakers Alum (Aluminum Ammonium Sulfate)	In Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Paraffin (Aliphatic Hydrocarbon)	Varies from Gas to Waxy Solid	1	1	1	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	-	-	1	-	-	2	X	-	-	-	-	2	1	1	1	1	1	1	
Pelargonic Acid	Colorless to Yellow Oil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pentachloroethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Pentachlorophenol In Oil	In Oil (Wood Preservative)	1	1	1	X	X	X	X	X	1	1	-	-	-	X	-	-	-	-	-	-	
Pentaerythritol (Monopentaerythritol)	White Powder	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pentane	Colorless Liquid	1	X	X	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	
Pentanol (Methyl Propyl Carbinol)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-	
Pentanone (Methyl Propyl Ketone)	Water White Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-	
Pentasol (Amyl alcohols, primary and secondary)	Liquid	1	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-	
Perchloric Acid (70%)	70% or Less with H2O	1	2	1	-	-	2	2	2	2	1	2	-	X	X	-	2	1	-	-	1	
Perchloroethylene	Colorless Liquid	1	2	-	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 Ether (Naptha)	Liquid	1	1	-	X	2	X	X	X	X	1	X	1	-	X	2	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 Degrees	Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Petroleum Oils (Refined)	Liquid	1	1	1	X	1	X	X	2	X	1	2	-	1	1	-	-	-	-	-	-	
Petroleum Oils (Sour)	Liquid	1	1	1	X	1	X	X	2	X	1	X	-	-	2	-	-	-	-	-	-	
Petroleum Paraffin Wax	Solid with low Melt Points	1	2	2	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS															COUPLINGS				
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Phenol (Carbolic Acid)	White or Pink Crystals	1	2	-	2	X	X	X	X	2	1	X	1	X	X	1	1	1	2	X	-
Phenol Acid	95% or less with H2O	1	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	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 PSI @ 120°F (49°C)	1	X	X	X	X	X	X	X	2	1	X	-	2	-	-	-	-	-	-	-
Phosphate Ester Hydraulic Fluid	Liquid	1	1	1	1	X	X	X	X	-	-	X	-	2	-	-	-	-	-	-	-
Phosphate Rock	Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate, Trisodium	In Water	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (100%)	Crystals	1	2	X	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (35% or less)	Colorless Liquid	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	1	1	1	X	X	X	1	1	X	2	1
Phosphoric Acid (75%)	Colorless Liquid	1	2	1	2	-	-	-	-	-	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (85%)	Syrupy Liquid	1	2	1	2	X	X	X	X	X	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (90%)	Syrupy Liquid	1	2	1	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	-	-	-	-	-	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	2	X	2	-	-	-	-	-	-	-	-
Pine Tar	Viscous Brown to Black Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Pinene	Colorless Transparent Liquid	1	1	-	X	2	X	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	2	X	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	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-
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	2	1	-	1	-	-	-	-	-	-	-	-	-
Potash (Potassium Carbonate) Aqueous Solution	Liquid	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	-	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	2	1	1	-	X	1
Potassium Chlorate	Colorless to white Powder	1	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!																					
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	-	-	-	-	-	-
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	-	2	1	-	-	-	-	-	1	-
Potassium Cyanide	White Crystal	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Potassium Dichromate	White Crystalline Powder	1	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-
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	1	X	1	-	2	2	-	-	-	-	-	-
Potassium Hydroxide (45% Caustic Potash)	Colorless to Cloudy Liquid	1	1	1	2	2	2	2	-	1	2	-	1	1	1	-	-	-	-	-	-
Potassium Hydroxide, Liquid	Colorless to Cloudy Liquid	1	1	-	1	2	2	2	2	1	X	2	-	X	X	-	-	-	-	-	-
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	-	-	-	-	-	-
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	2	-	-	-	-	-	-
Propionic Acid	Colorless Oily Liquid	1	1	1	2	X	2	2	X	2	1	2	-	-	-	1	1	-	-	-	-
Propyl Acetate	Colorless Liquid	1	1	1	-	-	-	-	-	-	X	-	2	-	-	-	-	-	-	-	-
Propyl Alcohol (Propanol)	Colorless Liquid	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	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	-	-	-
Pydraul 312	Liquid	1	1	-	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	1	X	2	1	X	X	2	2	X	2	X
Pyrethrum	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Pyridine (50%)	-	1	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	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypro
Pyrogard C, D	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
Pyronal (Transformer Oil)	Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
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	1	-
R																					
Ramrod (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	-
Rando Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Rape Seed Oil	Brownish to yellow Liquid	1	1	-	2	-	-	-	-	2	-	X	-	2	-	1	1	1	1	1	-
Red Oil (Commercial Oleic Acid) (MIL-5606)	Liquid	1	2	2	2	2	X	X	2	2	2	X	2	1	2	2	2	1	1	2	1
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	1	-
Richfield "A" Weed Killer	-	1	1	-	X	2	X	X	X	X	2	X	-	-	2	-	-	-	-	-	-
Road Paving Compound	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Road Tar	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubilene Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-
S																					
Salicylic Acid	White Powder	1	1	1	2	X	2	2	-	2	2	-	-	1	1	-	1	1	2	-	-
Salt Water (Sea Water)	Liquid	1	1	-	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2	-
Sauerkraut	-	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Sea Water	Colorless Liquid	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	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	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	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	1
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	1	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	1	-	-	-
Sodium Borate (Borax)	White Crystals	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Sodium Carbonate (Soda Ash)	Grayish Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	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	1	1	1	2	1	1	X	X	-
Sodium Cyanide	White Crystalline Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data																					
NOTE: Ratings are for the affect on the polymer only!																					
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	-	-	-	-	-	
Sodium Ferrocyanide	Yellow, transparent Crystals	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	-	-	-	-	-	-	-	
Sodium Hydroxide (40%)	Colorless Liquid	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	2	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	
Sodium Hydroxide (50%, Under 115°F (46°C))	Colorless Liquid	1	1	2	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	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	2	2	1	1	1	2	1	1	X	-	-	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	1	2	2	2	2	
Sodium Perborate	White, amorphous Powder	1	1	-	2	X	X	X	X	2	-	X	-	2	-	X	1	1	1	X	
Sodium Peroxide	Yellowish white Powder	1	1	2	-	-	-	-	1	1	1	1	2	X	1	X	1	1	1	X	
Sodium Phosphate	Colorless Crystals to white Powder	1	1	-	2	-	2	2	X	2	-	-	1	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	
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	1	1	1	-	-	-	-	1	
Sodium Sulfide Solution	Colorless to cloudy Liquid	1	2	-	1	2	-	2	2	1	2	2	-	X	-	-	-	-	-	1	
Sodium Sulfite	White Crystals or Powder	1	1	-	2	2	2	2	2	2	-	2	1	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 Sulphydrate	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 (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	-	
Sour Crude Oil	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	
Soybean Oil	Pale yellow oil	1	1	1	X	2	X	X	2	2	1	2	-	1	2	1	1	1	-	-	
Spent Acid	Liquid	1	2	2	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	1	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	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	2	2	2	2	2	2	1	2	1	1	1	X	2	1	X	X	
Stearin	Colorless crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	
Stoddard Solvent	Clear petroleum distillate	1	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	

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
		NOTE: Ratings are for the affect on the polymer only!																			
Straight Synthetic Oils	Liquid	1	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-
Styrene (Monomer)	Colorless Oily Liquid	1	2	-	X	X	X	X	-	X	2	-	2	2	-	2	X	2	X	2	-
Sucrose Solutions	Liquid	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	2	X	X	X	-	2	1	2	1	X	X	-	-	-	-	-	-
Sulfamic Acid 10% Under 170°F (77°C)	Colorless Liquid	1	X	-	-	-	X	X	-	-	2	2	1	-	-	-	-	-	-	-	-
Sulfate Liquors Under 150°F (66°C)	-	1	-	-	-	-	-	-	-	-	-	-	-	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 Liquid	-	-	-	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	-	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 Solution	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	2	X	X	-	-	2	X	2	X	X	-
Sulfuric Acid (30%)	Colorless Water Solution	1	1	1	1	2	2	2	1	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (50%)	Colorless Water Solution	1	1	1	1	X	X	X	2	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (60%) (48.5 deg Baume)	Colorless Liquid	1	1	1	1	X	X	X	X	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (75%)	Colorless to Brown Solution	1	1	1	2	X	X	X	X	2	1	2	2	X	-	X	X	2	X	X	-
Sulfuric Acid (88%) (64.7 deg Baume)	Colorless Liquid	1	2	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (93%)	Colorless to Brown Oily Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (96%)	Colorless Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (98%)	Colorless to Brown Oily Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid, Fuming (Oleum)	Colorless to Dark Brown Oily Liquid	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	X	X	X	-	2	1	1	1	-	1	-	X	2	1	X	X
Sulfurous Acid (75%)	Colorless Liquid	1	1	1	1	X	X	X	X	X	1	1	1	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	-	-
Suntac WR Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	-	1	1	-	-
Sunvis Oils 700, 800, 900	Liquid	1	1	-	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	2	-	1	-	-	-	-	-	1	1	-	-	-
T																					
Tall Oil	Black liquid	1	2	-	X	1	X	X	X	X	2	X	-	-	X	-	X	2	-	-	-
Tall Oil(Under 150°F (66°C))	Liquid	1	1	-	X	2	X	X	2	X	1	X	-	-	-	-	X	2	-	-	-
Tallow	White to clear Solid or Liquid	1	1	-	2	2	-	-	2	2	-	-	-	1	2	2	2	2	1	2	-
Tannic Acid	Faint Yellow Powder	1	1	1	1	X	2	2	2	1	1	2	1	1	1	2	1	1	2	X	-
Tannic Acid (10 %)	Yellow Liquid	1	1	-	-	X	2	2	2	X	1	2	1	1	1	2	1	1	2	X	-
Tar (Bituminous) Under 100°F (38°C)	-	1	1	2	X	2	X	X	2	X	1	-	X	-	-	1	1	1	1	2	-
Tar Oil	Yellow to dark brown Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Tartaric Acid	White Crystalline Powder	1	1	1	1	2	2	2	2	1	1	1	1	-	-	-	2	2	2	-	-
TEA (Triethanolamine)	Colorless Viscous Liquid	1	1	-	1	2	2	2	2	2	X	2	1	-	2	-	1	1	-	1	-
TEL (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	X	2	X	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	-	-	-	-	-	-
Tertiary Butyl Alcohol	Colorless Liquid or Crystal	1	2	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachlorobenzene	White Crystal	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE TABLE



CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS					
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polyprop.
		NOTE: Ratings are for the affect on the polymer only!																			
Tetrachloroethane (Acetylene Tetrachloride)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-
Tetrachloroethylene	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachloromethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachloronaphthalene	Oily Liquid to Crystalline Solid	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Tetradecanol	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	-	1	X	2	-	-	-	-	X
Tetrahydroxydicyclopentadiene (JP 10) ²	-	-	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
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	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-
THF (Tetrahydrofuran)	Colorless Liquid	1	X	-	2	X	X	X	X	2	1	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	-	X	X	X	X	X	X	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	1	1	X	1	1	1	-	1	2
Transformer Oil (Petroleum Type)1	Liquid	1	1	-	X	1	X	X	2	X	1	X	1	1	2	1	1	1	1	1	-
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	X	1	X	2	-	-	1	-	-	X	-	-
Tricalcium Aluminate (Calcium Aluminate)	Crystals or Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene	White Crystal or colorless Liquid	1	2	-	-	X	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	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	2	X	X	X	X	1	2	-	-	2	1	1	1	1	1	-
Turpentine	Liquid oil	1	X	1	X	2	X	X	X	X	1	X	2	1	1	-	1	1	1	2	-
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	-
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	-
Urea Solution (100%)	Liquid	1	1	-	-	2	1	1	1	2	-	1	1	1	2	1	1	1	-	-	-

CHEMICAL RESISTANCE TABLE



TABLE OF CONTENTS

ABOUT GATES

HYDRAULIC HOSE

HYDRAULIC HOSE
COUPLINGS

ENGINEERING AND
TECHNICAL DATA

1 = Preferred - Constant Contact 2 = Acceptable - Intermittent Contact X = Not Recommended - = No Data NOTE: Ratings are for the affect on the polymer only!	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS						
		Teflon	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	Butyl	Fluorocarbon	Hypalon	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene	
V																						
Varnish	-	1	2	-	X	X	X	X	X	X	2	X	-	1	-	2	1	1	-	2	-	
Vegetable Oils	Liquids	1	-	1	2	-	X	X	2	X	-	1	1	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	-	-	2	2	2	2	2	1	X	2	-	1	X	2	1	X	X	-	
Vinyl Acetate	Colorless Liquid	1	1	X	X	X	X	X	X	2	X	X	1	-	-	-	1	2	1	2	-	
Vinyl Chloride (Monomer)	-	1	2	-	X	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	-	-	-	-	-	-	
Vitrea Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	-	-	-	
VM&P Naptha (Mineral Spirits)	Colorless Liquid	1	1	-	X	1	X	X	-	X	1	X	-	1	-	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	-	-	-	-	-	-	-	-	-	-	
Water (Distilled)	Liquid	1	1	1	1	1	1	1	2	1	-	1	-	1	1	-	-	-	-	-	1	
Water (Potable)	Liquid	USE AQUARIUS HOSE ONLY										1					-	-	-	-	-	1
Water Glycols	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	
Water in Oil Emulsions	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	
White & Bagley No. 2190 Cutting Oil	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wines	Liquid	1	2	-	X	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	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-	
Xylenol (Dimethylphenol)	White solid, liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
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	-	
Zinc Chloride Solutions	Colorless to cloudy Liquid	1	1	-	-	1	2	2	1	2	1	1	1	1	2	X	2	1	X	X	-	
Zinc Chromate	Yellow Solid	1	1	-	-	-	-	-	-	-	1	1	-	-	-	1	1	-	-	-	-	
Zinc Hydrate	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Zinc Oxide	White or gray Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Zinc Sulfate Solutions	Colorless to cloudy Liquid	1	1	-	2	2	X	X	2	2	-	2	1	2	2	X	2	1	X	X	-	