DRIVEN BY POSSIBILITY™

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INDUSTRIAL HOSES

PRODUCT & APPLICATION GUIDE - 2024

DRIVEN BY POSSIBILITY™

Gates Corporation is a leading manufacturer of application-specific fluid power and power transmission solutions. At Gates, we are driven to push the boundaries of materials science to engineer products that continually exceed industry expectations.We don't rest on our rich heritage of innovation. We leverage it to inspire solutions that will power the next hundred years.

We invest continually in R&D and technology, so our products not only outperform industry standards; they also exceed our customers' demanding expectations. We invest in our people, bringing real-world experience that enables us to solve our customers' diverse challenges of today and anticipate those of tomorrow. And We are constantly expanding our product catalogue and value-added service. offerings to support every facet of our customers' operations.

In the most extreme environments and those more familiar, Gates is there with the right product, in the right place at the right time. Whether building original equipment or maintaining products in the aftermarket, we enable companies in every industry to be more efficient, productive, and profitable.

We are Gates. For over 25+ years, Gates India has a leading presence in fluid power and power transmission solutions. As a part of Gates Corporation, we share the same DNA of pushing the boundaries of materials science to engineer products that continually exceed expectations

With a team of more than 1500 employees, four world class manufacturing facilities, two corporate offices and a countrywide network of 280+ Distributors. Gates in India is catering to the needs of all major industrial and automotive OEMs and aftermarket. As a leading manufacturer in Power Transmission and Fluid Power, Gates is well known for its superior quality, technology expertise and application engineering support in India, which is trusted by our esteemed customers from diversified industries.

As a system solution provider, Gates Corporation is dedicated to driving innovation through substantial investments in research and development. Our focus on continuous improvement ensures that our product offerings evolve to meet the ever-changing needs of our clients. Backed by a team of experienced professionals, we possess the knowledge and skills to effectively tackle the diverse challenges encountered by our customers. Gates Corporation is committed to delivering customized solutions. Our unwavering dedication to excellence and client satisfaction enables us to enhance operational efficiency and promote success across a wide range of industries.

OUR VISION

"CONTINUALLY PUSH THE BOUNDARIES OF MATERIALS SCIENCE TO ADVANCE THE WAY THE WORLD MOVES."

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Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

Gates Corporation
Gates India Pvt. Limited
Ambala Chandigarh Highway
Lalru 140 501
Punjab
India

Holds Certificate No: **OHS 543271**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The Rubber Mixing, Manufacture and Assembly of Braided and Spiral Rubber Hoses, Rubber Hose Assemblies, Couplings and Adapters.

For and on behalf of BSI:

Michael Lam - Managing Director Assurance, APAC

Original Registration Date: 2019-11-27
Latest Revision Date: 2022-02-04

Effective Date: 2022-02-05
Expiry Date: 2025-02-05

Page: 1 of 2

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Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

Gates Corporation
Gates India Pvt. Limited
Ambala Chandigarh Highway
Lalru 140 501
Punjab
India

Holds Certificate No: **EMS 543269**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The Rubber Mixing, Manufacture and Assembly of Braided and Spiral Rubber Hoses, Rubber Hose Assemblies, Couplings and Adapters.

For and on behalf of BSI:

Michael Lam - Managing Director Assurance, APAC

Original Registration Date: 2008-10-10
Latest Revision Date: 2022-02-04

Effective Date: 2022-02-05
Expiry Date: 2025-02-05

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Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Gates Corporation
Gates India Private Limited
Ambala - Chandigarh Highway
P O Lalru 140 501
Punjab
India

Holds Certificate No: **FM 548292**

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Rubber Mixing, Manufacture and Assembly of Braided and Spiral Rubber Hoses.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2009-03-30
Latest Revision Date: 2021-03-30

Effective Date: 2021-03-30
Expiry Date: 2024-03-29

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DRIVEN BY POSSIBILITY™

THE VALUE CONNECTION RIGHT HOSE, RIGHT APPLICATION, RIGHT PRICE

Gates lineup of high quality, well designed, constantly improving, robust industrial hoses meet the demanding requirements of today's diverse range of industrial applications. Durability and flexibility are built in. A variety of tube and cover materials, reinforcement, colors, and hose designs provide the choices you need to select the right hose for your application. Whether your transfer job involves liquids, solids, or gases, discharge or solution, low or high pressure, you can always count on Gates Industrial Hoses or optimal performance at a competitive price. We are The Value Connection.

GET GATES CONNECTED FOR QUALITY HOSE AND MORE

Connect with Gates and get the best support in the business including: application assistance , expert local fields sales assistance, troubleshooting help, an industryleading safety program and an outstanding distribution networks. To assist in choosing the right hose assembley and tips on hose selection, safety, increasing hose life, minimizing downtime, and reducing costly repairs, please contact your Gates Representative. Gates Connected is all geared to providing the knowledge, service and value you need to get the most for your money spent. That's what it means to be Gates Connected!

HOSE MAINTENANCE

- Good maintenance results in longer life and safe working environment. Given below are few tips:
- Never exceed pressure rating of a hose. Never allow excessive pressure spikes or surges above a hose's maximum rated working pressure.
- Do not pull a hose by its coupling. It can lead to a dangerous failure.
- Never lift a heavy, large-diameter hose by the middle with ends hanging down. This can damage the hose's internal reinforcement.
- Support large-dia hoses, every 1 Offset [approx.] with slings or rope saddles.
- Where hose is exposed to excessive wear in one spot, add an extra protective cover, such as nylon sleeves.
- Any hose that has been mishandled, must be re-inspected and should pass a pressure test before its re-installation.
- All hoses should be visually inspected and pressure tested regularly. This is specially important for hoses in critical applications, such as acid/chemical, steam and petroleum.
- Check for coupling seepage and coupling slippage frequently

GENERAL TIPS FOR HOSES

STORAGE

- A hose can last five to eight years based on the shelf. However many variables in a storage shelf life, among them temperature, humidity, Ozone, Oil, Solvents, Corrosive materials, fumes, Insects, Rodents, Radioactivity, Space allowance bends in the stored hose.
- Store hose in cool, dry rooms.
- Store them away from direct sunlight and heat vents.
- Keep them away from arc welders and other electrical equipment.
- Do not open hoses from original wrapping till you actually need them.
- If the hose ends are plugged when shipped, do not unplug them till ready for installation.
- Do not hang coiled hose on a hook.
- Hose shipped straight should be stores straight.
- Open the packing carefully when using knives or sharp tools.

COUPLINGS

- Different types of couplings to be used for different hoses for the sake of human safety and hose assembly life.
- Use proper size couplings and install them correctly.
- Use approved couplings for steam LP Gas, Corrosive chemicals and petroleum products.
- If the coupling comes in contact with flammable material, make sure it is made of non-sparking material such as brass or aluminium.
- Before installing couplings check them for burns or sharp edges.
- Make sure the hose ends are cut square before installing the couplings.
- Avoid oil based and permanent lubricant when installing couplings. Water soap solution is a better alternative.

STATIC ELECTRICITY

- In some applications, it is important that the hose conducts electricity from the end of one coupling, through the hose, to the other coupling. This electrical bond, called a static bond, dissipates the Static Electricity that some materials generate when they pass through the hose. If this electricity is not picked up and conducted away from the material by the hose, a dangerous explosion could result.
- To discharge Static Electricity, static wires are provided in such hoses e.g. Petrol, Sandblast etc.

Warning: All industrial Hose assemblies have a limited life on a given application. Assuming the correct hose has been selected, this can be adversely affected by factors including external abuse, excessive pressures, high temperatures, misapplication, and internal abrasion. Should a hose assembly fail during use, serious injury or destruction could result from propelled couplings, whipping hose, high pressure or high velocity discharge, chemical contact, high temperature materials, explosion, or fire.
Contacts Gates product Appllcatlon for assistance and hose recommendations on specific applications.

** The products shown are Illustrative only and may not be an exact representation of the product.

Due to continual product improvements, Gates reserves the right to alter specifications and prices without prior notice. This Industrial hose catalog is the latest edition & supercedes all earlier Gates Industrial hose catalogs.

HOSE CLEANING

There are many different methods used to clean hose assemblies. An apron, safety glasses or face shield, rubber boots and gloves should be worn to help protect the person doing the cleaning from potential injury. Some suggested methods for select hoses in this catalog are listed below. Which method to use and how often cleaning should be performed is based on the following:

- Type of hose
- Residual material in the hose
- Cleanliness requirements for the application
- Cleaning facilities available
- Consideration for disposal of the residual material and cleaning solutions(s)
- Requirements for special applications such as foods, pharmaceuticals, etc.

SOLUTION RECOMMENDATIONS

1. Cleaning solutions should be chosen that will dissolve or remove the residual material without damaging the hose assembly.
2. A dilute solution of soap in water can often be sufficient. CAUTION – Some chemicals, such as concentrated acids or bases, can react with water releasing heat and byproducts, and possibly splatter.
3. Consult the MSDS of the material being cleaned to identify potential cleaning solutions.
4. After identifying potential cleaning solutions, check Chemical Resistance Table in this catalog for compatibility with hose tube and cover.
5. Non-compatibility of a cleaning solution can cause damage to the hose.

FLUSHING OR IMMERSING IN A CLEANING BATH

1. Do not exceed the maximum working pressure or temperature for the hose.
2. The cover of the hose should also be washed or wiped to remove any residual material.

STEAM CLEANING

1. Steam cleaning is NOT generally recommended. High temperatures can accelerate aging of a hose and shorten service life.
2. Do not exceed the maximum temperature rating of the hose. Doing so can cause defects such as tube de-lamination (reducing tube to reinforcement adhesion), tube cracking or tube flow leaving thin spots.
3. Never use superheated steam. This will exaggerate the potential damages noted above. Only “open-end” 50 psi steam should be used.
4. If the hose has blockage, remove it before introducing steam.
5. If the steam source has a wand attached, use caution inserting the wand so that physical damage to the hose is not caused. Sharp edges on the wand can cut the tube, and thin spots could occur where the hot wand contacts the tube.

RECOMMENDED CLEANING OF CHEMICAL HOSE

1. Drain the hose after each use.
2. Flush with water or other neutralizing cleaning solution.
3. Properly dispose of drained fluid and cleaning waste.
4. Between uses, store the hose in a clean, dry environment away from sunlight.
5. Avoid cross contamination. Dedicate a hose to handle a specific chemical.

RECOMMENDED CLEANING OF FOOD HOSE

1. Drain the hose after each use.
2. Flush with water or other cleaning solution.
3. Properly dispose of drained material and cleaning waste.
4. Between uses, store the hose in a clean, dry environment away from sunlight.
5. Avoid cross contamination. Dedicate a hose to handle a specific food material

WARNING

⚠ Hose Shelf Life

Hose in storage can deteriorate to the point where they fail immediately or prematurely after being taken out of storage.
The storage conditions, along with the rubber materials, can change the shelf life limit.
Some hose materials such as EPDM have a tendency to last longer in storage due to the inherent resistance characteristics of the material. But there are many more variables affecting hose storage, making hose shelf life a value that is hard to quantify.

Standards SAE J517, SAE J1273, BS 5244, ISO 2230 and ISO 8331 provide guidelines for hose storage and age control.
Refer to these specifications, and note that some storage precautions can support in the optimum shelf life.

Stored hose must not be subjected to damage that could reduce their expected service life and must be placed in a cool, dark and dry area with the ends capped. Stored hose must not be exposed to temperature extremes, ozone, oils, corrosive liquids or fumes, solvents, high humidity, rodents, insects, ultraviolet light, electromagnetic fields or radioactive materials.

The storage period should be kept to a minimum, rotation of stock is therefore essential. Hose must be stored in a manner that facilitates age control and first-in and first-out usage based on manufacturing date of the hose.
Before fitting, all hose should be subjected to visual examination for evidence of deterioration.
The shelf life of rubber Hydraulic hose that have passed visual inspection follow below recommendation scheme from the date of manufacture. The shelf life of thermoplastic Hydraulic hose is considered to be unlimited.
For non-hydraulic hose applications such as engine hoses and industrial hoses Gates shelf life recommendation is set at maximum 8 years from the date of manufacture.

Test recommendations for hoses	
Age	Recommendations (if stored in accordance with ISO 8331)
Up to 4 years	Use without futher testing
4 to 6 years	Use after representative samples subjected to a proof pressure test
6 to 8 years	Use after representative samples subjected to proof, impulse and burst pressure tests, and cold bend and electrical tests
Over 8 years	Scrap

WARNING

⚠ LISTING OF GATES RESTRICTED APPLICATIONS

The purpose of this list is to identify applications for which Gates will not recommend product. These applications have been identified as having risk potential beyond that which is acceptable. In general, Gates does not make or sell products suitable for most of these uses. These applications involve potential for severe injury, loss of life and/or high damage.
In most instances, they involve uses that cannot be monitored or serviced to control against catastrophic breaks and ruptures of the hose assembly. This list also identifies recommended responses to inquiries involving these applications.

SCOPE AND APPLICABILITY

This list encompasses hose and hose assembly applications in industrial, hydraulic and automotive markets. It is not considered all-inclusive, but represents applications that exceed the maximum acceptable level of risk. Predicting new applications that could also exceed limits of risk is difficult; therefore, this list also identifies characteristics that should be considered in evaluating other inquiries.

RESPONSIBILITY

Gates personnel and distributors are expected to respond to inquiries with the information in this document. They should also help define and identify other applications that carry these risk factors. Sales associates consult with a product application engineer before handling inquiries about excessively risky applications.

PROCEDURE OR WORK INSTRUCTION

The table on the following page lists applications that have sufficiently high damage or safety risks so as to be avoided.
This list is not inclusive. If an application is not specifically listed but has similar risk factors to those shown, no Gates product will be recommended without prior written approval by a member of Gates Product Application Engineering.

APPLICATION	APPLICATION
Certain Types of Hazardous Materials Alkali Metals (Lithium, Sodium, Potassium) Nerve gases Anhydrous Ammonia Chlorine Gas Chlorosulfonic Acid Fluorine Gas Hydrogen Gas Hydrogen Sulfide Gas Maliec Acid Mercury Vapor Phosphous Cryogenic atmospheric gases (liquefied oxygen, nitrogen)	Death or serious injury can result from toxic exposure, burns, and suffocation of operator or bystanders.
Hydraulic brake systems that require the hose to meet the SAE J1401 standard.	Gates does not sell hydraulic brake hoses or fittings where liquid pressure is used to activate the brake system and stop the vehicle. Loss of braking from an improper hose can result in property damage, serious injury or death to operator, passengers and bystanders.
High Pressure gas or air (over 500 psi), unless steam.	Death or serious injury from explosive decompression. Reduced serviceability due to permeation and cover separations.
In-flight aircraft (airborne), manned and unmanned applications.	Death or serious injury from loss of flightworthiness caused by system failure.
Buried Applications	Hidden from regular inspection and maintenance. Environmental damage. Permeation of material conveyed to surface.
Underwater applications, such as submarine transfer and some dock to ship applications.	Hidden from regular inspection and maintenance. Environmental damage. Permeation of material conveyed to surface.
Any “permanent” installations.	Hose has limited service life. Hidden from regular inspection and maintenance. High replacement costs. Costly structural damage.
In-floor and in-wall radiant heat applications.	Hidden from regular inspection and maintenance. High replacement costs. Costly structural damage.
Out of sight applications, especially in commercial buildings, for which inspection is not convenient or possible.	Hidden from regular inspection/maintenance. High replacement costs. Costly structural damage.
“Mix and Match” Hydraulic Hose and Couplings. (Using coupling and hose combinations not specifically recommended by Gates.)	Component Compatibility – Unknown performance. Death or serious injury from ejected couplings.
Reusable couplings on LPG hose.	Death or serious injury from Fire and Suffocation risks.

WARNING

DEFINITIONS

APPLICATION – The use of product for specific purposes. An application is defined by the size of hose, temperature range, the purpose it serves, the material conveyed, the operating pressure and cycles, the end terminations and fluid dynamics. Other environmental and operating conditions may also be specified as well.

BRAKE SYSTEMS – The use of hydraulic brake systems per SAE J1401 where liquid pressure is used to activate the brake systems are restricted. Hydraulic brake systems that use a liquid but not pressure (gravity etc.) are acceptable such as between the reservoir and cylinder. Air brake systems per SAE J1402 and SAE J844 where air pressure is used to activate the brake systems are acceptable. Vacuum brake systems per SAE J1403 where a vacuum is used to activate the brake systems are acceptable.

BURIED APPLICATION – An application that is underground or involves covering the hose assembly with earth, sand, gravel, mud, concrete or similar materials.

HOSE ASSEMBLY – The combination of a hose and its couplings (accessories such as sleeves, guards, and bend restrictors should also be considered where required or desirable).

IN-FLIGHT AIRCRAFT APPLICATION – Any application that involves any airborne system having both end connections on an aircraft while operating off of the ground whether manned or unmanned. This includes helicopters, drones, lighter than air craft (balloons), missiles, experimental aircraft, and gliders. This does not include aircraft servicing applications that are used and connected to ground based equipment while the aircraft, airborne equipment or machine is on the ground, for example, for refueling service.

IN-FLOOR AND IN-WALL RADIANT HEAT APPLICATION – Any application for providing heat through walls and floors of structures or roads and driveways by carrying fluids.

“MIX AND MATCH” – The use of unqualified or unsuitable hose, end-fitting or other coupling components with Gates components. For example, a competitor’s stem and ferrule on a Gates hose, Gates end-fittings on a competitor’s hose, or Gates end-fitting on a Gates hose in a way not recommended by Gates crimp data.

OUT OF SIGHT APPLICATION – Any application where the assembly is not visible for regular inspection or preventative maintenance.

PERMANENT INSTALLATION – Any application where the assembly is never expected to wear out or to be replaced.
These can also be applications where the expected service life of the assembly is shorter than the application’s reasonable inspection or maintenance interval.

PERMEATION – The migration or diffusion of fluids (liquids, gases) through the hose wall. Directions can be inward as well as outward. For example, a hose carrying LPG will allow diffusion of LPG through the hose wall into the environment.
Also, water can migrate into an air conditioning system through the hose wall.

RISK ANALYSIS – A systematic evaluation of the business, safety and legal exposure of an application.

RISK FACTOR – An element contributing to the chance of injury or loss. A hazard or dangerous chance.

UNDERWATER APPLICATION – An application that is under the surface of a body of water or covered by water.

CHEMICAL TRANSFER HOSES

DRIVEN BY POSSIBILITY™

CHEMICAL (GREENLINE) HOSE

3/4"- 1 1/4"

1 1/2"- 2"

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 GREENLINE CHEMICAL	46960252	3/4"	19.1	31	150	10	600	40	152	6.0	15	40
12 GREENLINE CHEMICAL	46960259	3/4"	19.1	31	150	10	600	40	152	6.0	15	30
12 GREENLINE CHEMICAL	46960949	3/4"	19.1	31	150	10	600	40	152	6.0	15	15/39
16 GREENLINE CHEMICAL	46960251	1"	25.4	37.5	150	10	600	40	203	8.0	15	40
16 GREENLINE CHEMICAL	46960950	1"	25.4	37.5	150	10	600	40	203	8.0	15	15/39
20 GREENLINE CHEMICAL	46960253	1 1/4"	31.8	45	150	10	600	40	203	8.0	10	40
20 GREENLINE CHEMICAL	46960951	1 1/4"	31.8	45	150	10	600	40	203	8.0	10	15/39
24 GREENLINE CHEMICAL	46960254	1 1/2"	38.1	51	150	10	600	40	254	10.0	10	40
24 GREENLINE CHEMICAL	46960257	1 1/2"	38.1	51	150	10	600	40	254	10.0	10	30
24 GREENLINE CHEMICAL	46960952	1 1/2"	38.1	51	150	10	600	40	254	10.0	10	15/39
32 GREENLINE CHEMICAL	46960255	2"	50.8	68	150	10	600	40	355	14.0	4	40
32 GREENLINE CHEMICAL	46960256	2"	50.8	68	150	10	600	40	355	14.0	4	30
32 GREENLINE CHEMICAL	46960953	2"	50.8	68	150	10	600	40	355	14.0	4	15/39

Recommended For: Conveying dilute chemicals e.g. Alums Liquor, Caustic Soda. Lime soltions, Dilute Hydrochloric Acid. Dilute Sulphuric acid (Ref. Gates Chemical Resistance Table or Gates representative for further information.)

Tube: Specially compounded EPDM, Black.

Reinforcement: Single high tenacity synthetic yarn from 3/4" to 1 1/4" size & Double high tenacity synthetic yarn from 1 1/2" to 2" sizes.

Cover: Specially compounded EPDM, Black.

Temp. Range: -40°C to + 100°C

Standard: Exceeds IS: 7654

CHEM MASTER™ PLUS XLPE (150 - 200) SD

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
CHEM MASTER PLUS XLPE	46950002*	3/4"	19.10	31.8	200	13.8	800	55.2	102	4.0	30	30.5
CHEM MASTER PLUS XLPE	46950003*	1"	25.40	38.1	200	13.8	800	55.2	127	5.0	30	30.5
CHEM MASTER PLUS XLPE	46950004*	1 1/4"	31.80	44.5	200	13.8	800	55.2	152	6.0	30	30.5
CHEM MASTER PLUS XLPE	46950005*	1 1/2"	38.10	51.8	200	13.8	800	55.2	203	8.0	30	30.5
CHEM MASTER PLUS XLPE	46950001*	2"	50.80	64.5	200	13.8	800	55.2	229	9.0	30	30.5
CHEM MASTER PLUS XLPE	46950006*	2 1/2"	63.50	77.5	150	10.3	600	41.4	305	12.0	30	30.5
CHEM MASTER PLUS XLPE	46950007*	3"	76.20	90.9	150	10.3	600	41.4	457	18.0	30	30.5
CHEM MASTER PLUS XLPE	46950008*	4"	101.60	119.1	150	10.3	600	41.4	610	24.0	30	30.5

*Imported Range

Recommended For: Tank truck, barge, ship, or storage tank transfer of a variety of chemical products. Chem Master™ Plus XLPE contains a wire helix for full suction capability, as well as for routing through tight bends. Its Modified Cross–linked Polyethylene tube stock is 'best in class' and is designed for cleaning with 'open–end' 50 PSI steam or in a bath containing 10% (NaOH) @ +212°F (+100°C). Cleaning in place (CIP) methods may be used. Refer Gates chemical resistance table for proper hose selection.

Tube: Type K (Gatron™ Modified Cross–linked Polyethylene.) Tan. High chemical resistance.

Reinforcement: Synthetic, high tensile textile cord with steel wire helix.

Cover: Type P (EPDM). Black corrugated with orange stripe.

Temp. Range: -40°C to +121°C (Normal Service) **Used For:** Transfer of >950 basic chemical products

CAUTION: For applications requiring greater than 90% sulfuric acid contact Gates Application/Product team. Chem Master™ Plus XLPE is designed to withstand fluid temperatures to +250°F (+121°C); however the rating is dependent on the specific chemical conveyed. ContactApplication / Product team for any chemical above +125°F (+52°C). Not recommended for 'closed steam' cleaning.

GP 60/80 (CONDUCTIVE HOSE)

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
6 GP60	32197951	3/8"	9.5	17	536	37.0	1595	110	60	2.4	26	
8 GP60/GP80	32063950	1/2"	12.7	20.5	540	37.2	1600	110	100	3.9	25	-
10 GP80	32063951	5/8"	15.9	24.2	440	30.3	1300	90	115	4.5	20	-
12 GP 80 HOSE	32195351	3/4"	19.1	29.0	440	30.3	1300	90	135	5.3	20	-
16 GP80	32190039	1"	25.4	35.8	435	30.0	1305	90	130	5.1	-	-

Recommended For: General industrial applications such as oil, alcohols, Aquerous solutions, hydraulicfluids, acids, detergents and chemicals.

Tube: NBR (Nitrile)

Reinforcement: Single fibre braid.

Cover: NBR (Nitrile)/ PVC **Temp. Range:** -40°C to +95°C

PLASTER/GROUTING HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
20 PLASTER HOSE	41290409	1 1/4"	31.8	45.0	580	40	1740	120	184	7.5	-	-
24 PLASTER HOSE	41290840	1 1/2"	38.1	53.0	580	40	1740	120	221	9.0	-	-
32 PLASTER HOSE	41290839	2"	50.8	66.5	580	40	1740	120	294	12.0	-	-

Recommended For: High Pressure hose for plaster spraying/Hose for conveying cement mixture for plastering applications

Tube: Highly abrasion resistant, natural rubber [Black]

Reinforcement: Two braids of high tenacity synthetic textile yarn.

Cover: Abrasion resistant & resilient natural rubber [Black]

Temp. Range: -30°C to +80°C

CONCRETE HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
40 CONCRETE HOSE	41290811	2 1/2	63.5	89	1233	85	3700	255	760	30	10	-
48 CONCRETE HOSE	41290813	3"	76.2	100	1233	85	3700	255	1000	39	10	-

Recommended For: To handle the pumping of concrete with high head pressure from concrete boom truck and as a discharge hose on the delivery end of high pressure concrete pumps. Specially designed high abrasion resistant tube is most suited for handling wet concrete. Plaster or gout material.

Tube: Specially compounded abrasion resistant & resilient natural rubber [Black].

Reinforcement: Two layers of high tensile steel wire.

Cover: Specially compounded abrasion resistant natural rubber [Black].

Temp. Range: -40°C to + 70°C

Standard: Gates Proprietary Hose

SAND BLAST (GREENLINE) HOSE - 7 Bar

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 SAND BLAST HOSE	41290806	3/4"	19.1	38.6	100	7.0	500	35.0	203	8.0	15	-
16 SAND BLAST HOSE	41290804	1"	25.4	45.1	100	7.0	500	35.0	304	12.0	5	-
20 SAND BLAST HOSE	41290800	1 1/4"	31.8	52.7	100	7.0	500	35.0	304	12.0	5	-
24 SAND BLAST HOSE	41290801	1 1/2"	38.1	58.5	100	7.0	500	35.0	457	18.0	5	-
32 SAND BLAST HOSE	41290810	2"	50.8	74.7	100	7.0	500	35.0	508	20.0	5	-

Recommended For: Sand & Shot blasting applications, where abrasive materials are carried at high velocity

Tube: Specially compounded abrasion resistant & resilient natural rubber [Black]

Reinforcement: Double braid high tenacity synthetic textile yarn. Twin copper wires, laid spirally in opposite direction for electrical conductivity.

Cover: Specially compounded abrasion resistant natural rubber [Black].

Temp. Range: -40°C to + 70°C

Standard: Exceeds IS: 5894 Type 1

WRESTLER SAND BLAST HOSE

1 1/4"- 1 1/2"

3/4"- 1"

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 SAND BLAST HOSE - WRESTLER	41290817	3/4"	19.1	33.2	175	12.0	700	48.0	178	7.0	25	-
16 SAND BLAST HOSE - WRESTLER	41290818	1"	25.4	39.2	175	12.0	700	48.0	229	9.0	25	-
20 SAND BLAST HOSE - WRESTLER	41290819	1 1/4"	31.8	48.2	175	12.0	700	48.0	254	10.0	25	-
24 SAND BLAST HOSE - WRESTLER	41290820	1 1/2"	38.1	56.2	175	12.0	700	48.0	304	12.0	20	-

Recommended For: Highly abrasive material used in Sand Blasting applications including River Sand Garnets, Copper Slag, Coal Particles, Corundum, Cast Steel, Grit Glass etc. Specially designed for superior performance-longer life due to very low tube wear.

Tube: Excellent abrasion resistant, Anti-static, Modified natural rubber [Black]

Reinforcement: Single high-tenacity synthetic yarn for (3/4" & 1" sizes). Double yarn braid for 1-1/4" & 1-1/2" sizes.

Cover: Specially compounded abrasion resistant & resilient natural rubber [Black].

Temp. Range: -40°C to + 75°C

Standard: Meets IS: 5894

GAJRA (COKE INJECTION) HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
24 GAJRA WIRE BRAID HOSE	41290832	1 1/2"	38.1	64.5	145	10	580	40	381	15	-	-
32 GAJRA WIRE BRAID HOSE	41290837	2"	50.8	74.7	145	10	580	40	508	20	-	-

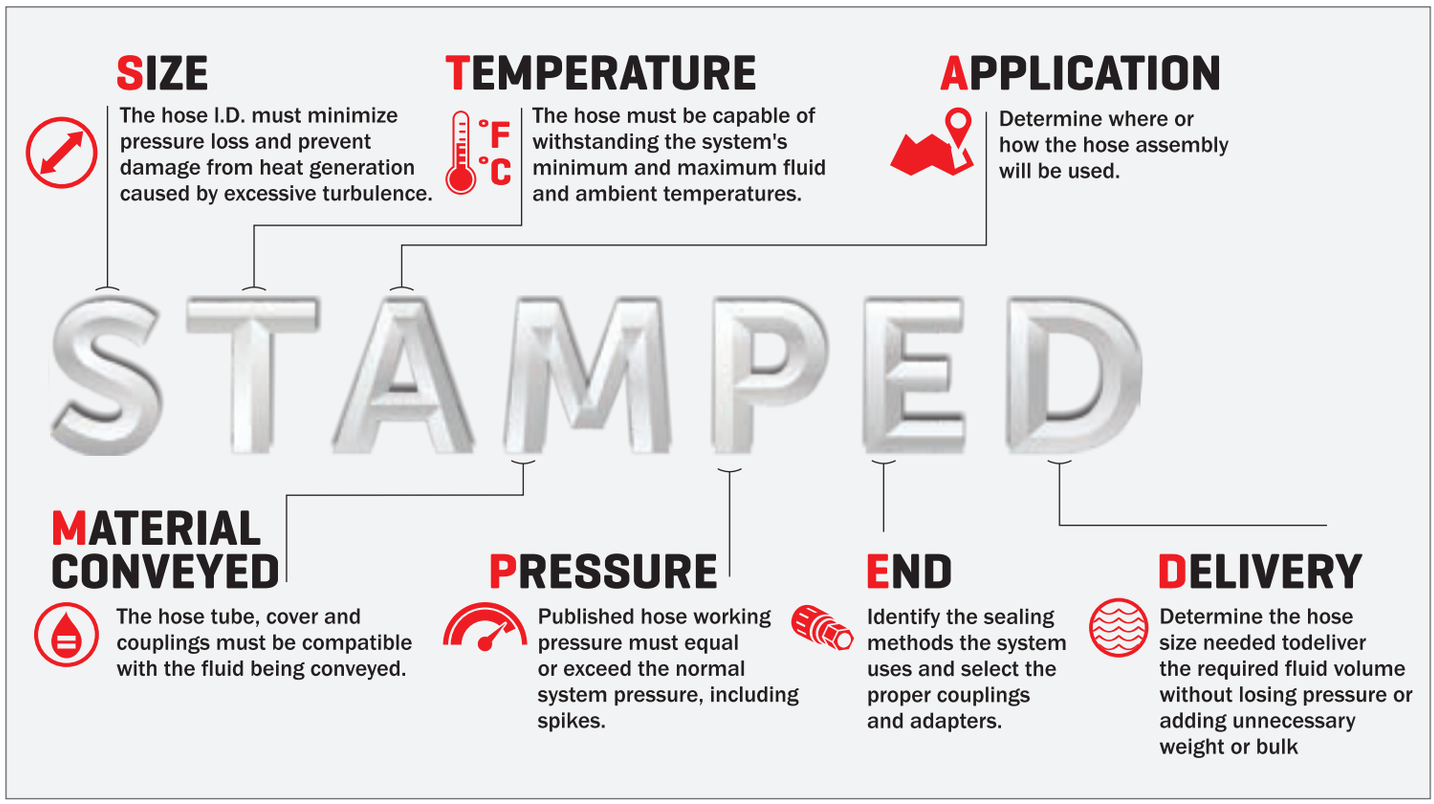
Recommended For: Most suitable for highly abrasive particles like Coke particles, Gravel, sand or a mixture of all with air. Out performs any hose in such severe working conditions. Especially recommended for extreme abrasive conditions where normal sand blast hoses are not able to perform.

Tube: Extremely high resistant natural rubber/synthetic rubber, [Black] /Antistatic modified NR.

Reinforcement: 2 Wire of high tensile steel.

Cover: Excellent abrasion resistant natural rubber/synthetic rubber, [Black]

Temp. Range: -30°C to +70°C



AIR-WATER (GREENLINE) HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
8 AIR WATER HOSE	32063963	1/2"	12.7	20	170	12	510	36.0	127	5.0	26	15/39
8 AIR WATER HOSE	32063984	1/2"	12.7	20	170	12	510	36.0	127	5.0	26	40 +
12 AIR WATER HOSE	32063964	3/4"	19.1	28.5	170	12	510	36.0	152	6.0	25	15/39
12 AIR WATER HOSE	32063985	3/4"	19.1	28.5	170	12	510	36.0	152	6.0	25	40 +
16 AIR WATER HOSE	32063965	1"	25.4	35.5	170	12	510	36.0	203	8.0	15	15/39
16 AIR WATER HOSE	32063983	1"	25.4	35.5	170	12	510	36.0	203	8.0	15	Min & Max 30
16 AIR WATER HOSE	32063994	1"	25.4	35.5	170	12	510	36.0	203	8.0	15	Max 40
20 AIR WATER HOSE	32063966	1 1/4"	31.8	43.5	170	12	510	36.0	254	10.0	10	15/39
20 AIR WATER HOSE	32063986	1 1/4"	31.8	43.5	170	12	510	36.0	254	10.0	10	Min & Max 40
20 AIR WATER HOSE	32063989	1 1/4"	31.8	43.5	170	12	510	36.0	254	10.0	10	Min & Max 30
24 AIR WATER HOSE	32063967	1 1/2"	38.1	50	170	12	510	36.0	304	12.0	8	15/39
24 AIR WATER HOSE	32063987	1 1/2"	38.1	50	170	12	510	36.0	304	12.0	8	Min & Max 40
24 AIR WATER HOSE	32063990	1 1/2"	38.1	50	170	12	510	36.0	304	12.0	8	Min & Max 30
32 AIR WATER HOSE	32063979	2"	50.8	65	170	12	510	36.0	419	16.5	4	15/39
32 AIR WATER HOSE	32063988	2"	50.8	65	170	12	510	36.0	419	16.5	4	Min & Max 40

Recommended For: All air and water applications requiring maximum flexibility in engineering Industry, workshop, shipyards, irrigation etc.

Tube: Specially compounded Nitrile rubber, [Black]

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Specially compounded high abrasion resistant Nitrile rubber for size from 1/2" to 3/4" sizes. Highly abrasion resistant modified natural rubber from 1" to 2" sizes.

Temp. Range: -30°C to + 82°C

Standard: Exceeds IS: 446 Type 1, 444 Type 2

ROCK DRILL (GREENLINE) HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
8 ROCK DRILL HOSE	32180938	1/2"	12.7	19.8	300	21	1200	84	127	5.0	25	-
12 ROCK DRILL HOSE	32180936	3/4"	19.1	28	300	21	1200	84	152	6.0	25	-
12 ROCK DRILL HOSE	32180943	3/4"	19.1	28	300	21	1200	84	152	6.0	25	40+
16 ROCK DRILL HOSE	32180932	1"	25.4	37.6	300	21	1200	84	203	8.0	25	-

Recommended For: Heavy duty, high pressure use on industrial construction and pnematic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.

Tube: Specially compounded Nitrile Rubber, [Black]

Reinforcement: Single braid of high tenacity synthetic yarn.

Cover: Specially compounded high abrasion resistant Nitrile rubber for 1/2" & 3/4" size [Black]. High tension resistant modified natural rubber for 1" size.

Temp. Range: -30°C to +82°C

Standard: Exceeds IS: 446 Type 3

PNEUMATIC (GREENLINE) HOSE

1/4"- 1"

1 1/4"- 2"

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
4 PNEUMATIC HOSE	32012656	1/4"	6.35	12.7	200	14	800	55	76	3.0	26	40
4 PNEUMATIC HOSE	32012825	1/4"	6.35	12.7	200	14	800	55	76	3.0	26	15/39
5 PNEUMATIC HOSE	32012655	5/16"	7.94	14.3	200	14	800	55	102	4.0	26	40
5 PNEUMATIC HOSE	32012826	5/16"	7.94	14.3	200	14	800	55	102	4.0	26	15/39
6 PNEUMATIC HOSE	32012657	3/8"	9.5	16.7	200	14	800	55	102	4.0	26	40
6 PNEUMATIC HOSE	32012827	3/8"	9.5	16.7	200	14	800	55	102	4.0	26	15/39
8 PNEUMATIC HOSE	32012658	1/2"	12.7	20	200	14	800	55	127	5.0	25	40
8 PNEUMATIC HOSE	32012822	1/2"	12.7	20	200	14	800	55	127	5.0	25	15/39
12 PNEUMATIC HOSE	32012659	3/4"	19.1	28.5	200	14	800	55	152	6.0	15	40
12 PNEUMATIC HOSE	32012828	3/4"	19.1	28.5	200	14	800	55	152	6.0	15	15/39
16 PNEUMATIC HOSE	32012660	1"	25.4	33.5	200	14	800	55	203	8.0	15	Min & Max 40
16 PNEUMATIC HOSE	32012663	1"	25.4	33.5	200	14	800	55	203	8.0	15	Min & Max 30
20 PNEUMATIC HOSE	32012807	1 1/4"	31.8	38.2	200	14	800	55	254	10.0	15	30/40
24 PNEUMATIC HOSE	32012661	1 1/2"	38.1	47.5	200	14	800	55	305	12.0	10	Min & Max 40
24 PNEUMATIC HOSE	32012830	1 1/2"	38.1	47.5	200	14	800	55	305	12.0	10	15/39
32 PNEUMATIC HOSE	32012662	2"	50.8	60.8	200	14	800	55	305	12.0	10	Min & Max 40
32 PNEUMATIC HOSE	32012665	2"	50.8	60.8	200	14	800	55	305	12.0	10	Min & Max 30
32 PNEUMATIC HOSE	32012831	2"	50.8	60.8	200	14	800	55	305	12.0	10	15/39

Recommended For: All types of pneumatic tools in industries, compressed air applications and construction industry.

Tube: Modified Nitrile Rubber, Black

Reinforcement: Single braid of high tenacity synthetic yarn from sizes 1/4" mm to 1", single braid of high tensile brass coated Steel wire from sizes 1 1/4" mm to 2".

Cover: Specially compounded high abrasion resistant nitrile rubber for sizes 1/4" to 3/4" [Black]. Highly abrasion resistant modified natural rubber for sizes 1" and above [Black].

Temp. Range: -30°C to+82°C

Standard: Exceeds IS: 446 Type 2

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MINE MASTER™ AIR DRILL 500

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 AIR DRILL	36180404	3/4"	19.1	28.3	500	34.5	2000	138	152	6.0	25	40
12 AIR DRILL	36180411	3/4"	19.1	28.3	500	34.5	2000	138	152	6.0	25	30
12 AIR DRILL	36180850	3/4"	19.1	28.3	500	34.5	2000	138	152	6.0	25	15/39
16 AIR DRILL	36180405	1"	25.4	36.6	500	34.5	2000	138	201	7.9	25	40
16 AIR DRILL	36180409	1"	25.4	36.6	500	34.5	2000	138	201	7.9	25	30
16 AIR DRILL	36180851	1"	25.4	36.6	500	34.5	2000	138	201	7.9	25	15/39
20 AIR DRILL	36180406	1 1/4"	31.8	44.2	500	34.5	2000	138	254	10.0	25	40
20 AIR DRILL	36180410	1 1/4"	31.8	44.2	500	34.5	2000	138	254	10.0	25	30
20 AIR DRILL	36180852	1 1/4"	31.8	44.2	500	34.5	2000	138	254	10.0	25	15/39
24 AIR DRILL	36180402	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	15	30
24 AIR DRILL YELLOW COVER	36180415	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	15	40
24 AIR DRILL	36180853	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	15	15/39
24 AIR DRILL YELLOW COVER	36181003	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	15	30
24 AIR DRILL	36181004	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	15	40
32 AIR DRILL	36180403	2"	50.8	63.5	500	34.5	2000	138	355	14.0	15	40
32 AIR DRILL	36180854	2"	50.8	63.5	500	34.5	2000	138	355	14.0	15	15/39
40 AIR DRILL	36180861	2 1/2	63.5	79.7	500	34.5	2000	138	762	30.0	10	-
48 AIR DRILL	36180412	3"	76.2	93.3	500	34.5	2000	138	914	36.0	10	30
48 AIR DRILL	36180865	3"	76.2	93.3	500	34.5	2000	138	914	36.0	10	15/39

Recommended For: Heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.

Tube: Specially compounded Nitrile Rubber, Black

Reinforcement: Single braid of high tensile steel wire.

Cover: Option 1: Specially compounded highly abrasion resistant natural rubber, Black.
Option 2: Highly abrasion resistant modified Nitrile rubber, Yellow. in 1 1/2 size with perforated cover. Yellow cover meet MSHA flame.

Temp. Range: -30°C to + 82°C

MINE MASTER™ AIR DRILL 500 (High Temperature)

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
24 MINE MASTER AIR DRILL HT	36181005	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	-	30
24 MINE MASTER AIR DRILL HT	36181006	1 1/2"	38.1	50.5	500	34.5	2000	138	304	12.0	-	40

Recommended For: Heavy duty high pressure use on industrial, construction and pneumatic mining application, requiring and extra heavy duty hose with an oil resistant tube and highly abrasion resistant cover. Improved product with higher temperature rating specially designed for Water Well Rig Segment.

Tube: Specially compounded Nitrile Rubber, [Black]

Reinforcement: Single braid of high tensile steel wire.

Cover: Highly abrasion resistant modified Nitrile rubber, Black

Temp. Range: -30°C to + 100°C

18MB AIR DRILL HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
32 18MB AIR DRILL (WIRE BRAID)	36180986	2"	51.3	70.4	500	34.5	2000	138	355	14.0	15	-
48 18MB AIR DRILL (WIRE BRAID)	36181001	3"	76.2	100.8	500	34.5	2000	138	914	36.0	10	20/30

Recommended For: Heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion.

Tube: Specially Compounded Chloroprene

Reinforcement: 2 braids of high tensile steel wire.

Cover: Nitrile Rubber, Grey

Temp. Range: -30°C to + 100°C

FURNACE HOSE

DRIVEN BY POSSIBILITY™

CARBON FREE HOSE (Non Conductive Hose)

3/8"- 1"

1 1/4" & above

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
6 CARBON FREE HOSE	32012868	3/8"	9.5	17.0	247	17.0	986	68.0	150	5.9	-	-
8 CARBON FREE HOSE	32012613	1/2"	12.7	21.8	250	17.2	1000	69.0	102	4.0	25	-
12 CARBON FREE HOSE	32012614	3/4"	19.8	31.0	250	17.2	1000	69.0	127	5.0	25	-
16 CARBON FREE HOSE	32012615	1"	26.3	37.5	250	17.2	1000	69.0	152	6.0	25	-
20 CARBON FREE HOSE	32012616	1 1/4"	31.8	45.2	250	17.2	1000	69.0	191	7.5	25	-
24 CARBON FREE HOSE	32012617	1 1/2"	39.5	53.6	250	17.2	1000	69.0	203	8.0	20	-
32 CARBON FREE HOSE	32012618	2"	52.0	65.5	200	14.0	800	55.0	304	12.0	10	-
36 CARBON FREE HOSE (57.0 MM)	32012869	2-1/4	56.5	71.5	200	14.0	800	55.0	500	19.7	-	-
40 CARBON FREE HOSE	32012626	2 1/2	63.5	81.0	200	14.0	800	55.0	508	20.0	10	-
48 CARBON FREE HOSE	32012627	3"	76.2	93.5	200	14.0	800	55.0	635	25.0	5	-
3 1/2" CARBON FREE HOSE*	33195063	3 1/2"	88.9	106	200	14.0	600	41.0	-		-	-
4" CARBON FREE HOSE*	36805139	4"	101.6	120	200	14.0	600	41.0	-		-	-

*Imported Range

Recommended For: Specialised Furnace Coolant applications in Electrical Steel Industry and other Non-Conductive applications. Engineered with specially developed carbon free tube and cover, whereby meeting service requirements of low leakage current.

Tube: Modified synthetic Rubber, Grey

Reinforcement: Single braid high tenacity synthetic yarn for (3/8" to 1") sizes. Double braid, high tenacity synthetic yarn for 1 1/4" & above sizes.

Cover: Specially compounded Nitrile, Gréen

Temp. Range: -40°C to +95°C

FURNACE HOSE

DRIVEN BY POSSIBILITY™

HHT HOSE (Non Conductive Hose)

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
6 HHT HOSE	32012635	3/8"	9.50	16.30	145	10.0	580	40.0	102	4.0	25	-
8 HHT HOSE	32012636	1/2"	12.70	20.00	145	10.0	580	40.0	127	5.0	25	-
10 HHT HOSE	32012637	5/8"	15.80	24.00	145	10.0	580	40.0	152	6.0	20	-
12 HHT HOSE	32012638	3/4"	19.05	28.00	145	10.0	580	40.0	152	6.0	15	-
16 HHT HOSE	32012639	1"	25.40	35.00	145	10.0	580	40.0	203	8.0	15	-
20 HHT HOSE	32012640	1 1/4"	31.75	43.50	145	10.0	580	40.0	254	10.0	10	-
24 HHT HOSE	32012667	1 1/2”	38.10	53.60	145	10.0	580	40.0	305	12.0	8	-
32 HHT HOSE	32012668	2”	50.80	65.50	145	10.0	580	40.0	419	16.5	4	-

Recommended For: Water hose for cable cooling /furnace cooling non-conductive applications in Steel & Aluminum industry with low leakage current.

Tube: Grey oil resistant synthetic rubber [Nitrile]

Reinforcement: One braid of high tenacity synthetic yarn.

Cover: Red, Modified synthetic rubber [Nitrile/PVC]

Temp. Range: -40°C to +100°C

FUEL MASTER™ CURB PUMP 1WB HOSE

PRODUCT DESCRIPTION	PRODUCT NO.										
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)
12 FUEL MASTER HOSE BLUE COVER	36240826	3/4"	19.1	28.7	250	17	750	51	152	6.0	26
12 FUEL MASTER HOSE GREEN COVER	36240827	3/4"	19.1	28.7	250	17	750	51	152	6.0	26
12 FUEL MASTER HOSE RED COVER	36240828	3/4"	19.1	28.7	250	17	750	51	152	6.0	26
12 FUEL MASTER HOSE YELLOW COVER	36240829	3/4"	19.1	28.7	250	17	750	51	152	6.0	26
12 FUEL MASTER HOSE BLACK COVER	36240830	3/4"	19.1	28.7	250	17	750	51	152	6.0	26
16 FUEL MASTER HOSE BLACK COVER	36240823	1"	25.4	35.0	250	17	750	51	203	8.0	26
16 FUEL MASTER HOSE BLUE COVER	36240824	1"	25.4	35.0	250	17	750	51	203	8.0	26
16 FUEL MASTER HOSE GREEN COVER	36240825	1"	25.4	35.0	250	17	750	51	203	8.0	26

Recommended For: Dispensing all types of petrol and diesel fuels for service station pumps. A heavy duty hard wall hose which does not collapse in reel use or behind the nozzle in demanding service conditions.

Tube: Specially compounded Nitrile rubber black, resistant to highly aromatic gasoline.

Reinforcement: Single braided high tenacity steel wire.

Cover: Modified Nitrile rubber. Available in Blue, Black, Green, Red and Yellow covers (smooth finish) as per below part nos.

Temp. Range: -30°C to +49°C

Standard: Meet and Exceed EN 1360: 2013 ATEX Approved

PETROL (GREENLINE) HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 PETROL HOSE	32241856	3/4"	19.1	32.2	100	7.0	400	28.0	152	6.0	20	-
16 PETROL HOSE	32241857	1"	25.4	38.0	100	7.0	400	28.0	203	8.0	20	-

Recommended For: Dispensing all types of petrol and diesel fuels for service station pumps. Electrical conductivity having two number braided copper flex wires laid spirally in opposite direction for electrical conductivity.

Tube: Specially compounded nitrile rubber black. Resistant to highly aromatic gasoline.

Reinforcement: Two Braid of high tenacity synthetic yarn. Copper wire ensures reliable conductivity.

Cover: Modified Nitrile rubber, Black.

Temp. Range: -30°C to +49°C

Standard: Exceeds IS : 2396

PETROLEUM TRANSFER HOSES

DRIVEN BY POSSIBILITY™

CNG HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
4 CNG	32201151	1/4"	6.35	12.7	300	21.0	700	48.0	76	3.0	26	-
6 CNG	32201153	3/8"	9.5	15.9	300	21.0	700	48.0	102	4.0	26	-
8 CNG	32201154	1/2"	12.7	19.8	300	21.0	700	48.0	127	5.0	20	-
12 CNG	32201156	3/4"	19.1	28.5	300	21.0	700	48.0	152	6.0	15	-

Recommended For: CNG applications for use in CNG kits in automobiles up to 2.1 Mpa – (Cars, LCV, HCV etc)

Tube: Specially compounded oil resistant Nitrile Rubber, Black

Reinforcement: Single high-tenacity synthetic yarn.

Cover: Specially compounded oil abrasion resistant Nitrile rubber, Black

Temp. Range: -40°C to +100°C

Standard: Meet SAE J30 R6 AIS 028, ARAI approved

FUEL MASTER™ AIRCRAFT FUELING HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
24 FUEL MASTER AIRCRAFT FUELING HOSE	41101901	1-1/2"	38.10	56	300	20	1200	80	245	10	25	30/40
32 FUEL MASTER AIRCRAFT FUELING HOSE	41101902	2"	50.9	66	300	20	1200	80	356	14	25	30/40
40 FUEL MASTER AIRCRAFT FUELING HOSE	41101903	2-1/2"	63.50	86	300	20	1200	80	508	20	25	30
48 FUEL MASTER AIRCRAFT FUELING HOSE	41101904	3"	76.2	99	300	20	1200	80	635	25	25	30

Recommended For: All operations associated with ground fueling & de-fuelling of aircrafts. Suitable for applications with petroleum fuels having an aromatic hydrocarbon content not exceeding 30% by volume.

Tube: Black, Resistant to aviation fuel, Nitrile Rubber

Reinforcement: 2 braid of High-tenacity synthetic yarn

Cover: Black, Anti-static, Non-flammable, Abrasion resistant, Blend of Synthetic Rubber

Temp. Range: -40°C to +70°C

Standard: Meets BS EN 1361:2004, EI 1529:2014 Type C Grade 2, IS 5797:2016,Type C & Grade.

STEAM TRANSFER HOSES

DRIVEN BY POSSIBILITY™

PLANT MASTER® STEAM 250 (Formerly–Steam King)

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 PLANT MASTER STEAM 250	36050852	3/4"	19.1	32.3	250	17.2	2500	172	229	9.0	20	-
16 PLANT MASTER STEAM 250	36050853	1"	25.4	38.5	250	17.2	2500	172	279	11.0	20	-
20 PLANT MASTER STEAM 250	36050855	1 1/4"	31.8	46.0	250	17.2	2500	172	406	16.0	20	-
24 PLANT MASTER STEAM 250	36050856	1 1/2"	38.1	54.3	250	17.2	2500	172	508	20.0	10	-
32 PLANT MASTER STEAM 250	36050857	2"	50.8	67.5	250	17.2	2500	172	635	25.0	10	-

Recommended For: Heavy duty industrial uses including heat control, melting of substance such as wax and glue, thawing. cleaning and steam transfer applications. It will handle all types steam saturated and superheated up to 185 psi and +232 ºC. Note: Do not alternate change between steam and water.

Tube: EPDM, Black

Reinforcement: Two braids of high tensile brass coated steel wire.

Cover: EPDM, black. All sizes are perforated.

Temp. Range: -40°C to +232°C

Standard: Exceeds IS: 10655 Type 3 & BS: 5342 Type 2

STEAM (GREENLINE) HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
12 STEAM HOSE	36050867	3/4"	19.1	31	150	10.0	1500	100	254	10.0	25	-
16 STEAM HOSE	36050863	1"	25.4	36.6	150	10.0	1500	100	304	12.0	15	-
20 STEAM HOSE	36050864	1 1/4"	31.8	43.5	150	10.0	1500	100	406	16.0	15	-
24 STEAM HOSE	36050865	1 1/2"	38.1	50.5	150	10.0	1500	100	508	20.0	15	-
32 STEAM HOSE	36050866	2"	50.8	63.5	150	10.0	1500	100	635	25.0	10	-

Recommended For: Excellent steam handling. The hose features a specially compounded, perforated synthetic rubber cover intended for use where the hose is exposed to all types of steam-saturated and superheated up to 150 psi and 195°C. Note: Do not alternate change between steam and water.

Tube: EPDM, Black

Reinforcement: Single braid of high tensile brass coated steel wire

Cover: EPDM, black. All sizes are perforated.

Temp. Range: -40°C to + 195°C

Standard: Exceeds IS: 10655 Type 2 & BS: 5342 Type 1

LOL HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
4 LOLC LOL PLUS LOCK-ON HOSE - GRAY	32844701	1/4"	6.35	12.0	300	21	1200	84	76.0	3.0	26	-
4 LOLG LOL PLUS LOCK-ON HOSE - GREEN	32844706	1/4"	6.35	12.0	300	21	1200	84	76.0	3.0	26	-
4 LOLB LOL PLUS LOCK-ON HOSE - BLUE	32844711	1/4"	6.35	12.0	300	21	1200	84	76.0	3.0	26	-
4 LOLA LOL PLUS LOCK-ON HOSE - BLACK	32844827	1/4"	6.35	12.0	300	21	1200	84	76.0	3.0	26	-
4 LOLR LOL PLUS LOCK-ON HOSE - RED	32844832	1/4"	6.35	12.0	300	21	1200	84	76.0	3.0	26	-
6 LOLC LOL PLUS LOCK-ON HOSE - GRAY	32844702	3/8"	9.5	16.0	300	21	1200	84	76.0	3.0	26	-
6 LOLG LOL PLUS LOCK-ON HOSE - GREEN	32844707	3/8"	9.5	16.0	300	21	1200	84	76.0	3.0	26	-
6 LOLB LOL PLUS LOCK-ON HOSE - BLUE	32844712	3/8"	9.5	16.0	300	21	1200	84	76.0	3.0	26	-
6 LOLA LOL PLUS LOCK-ON HOSE - BLACK	32844828	3/8"	9.5	16.0	300	21	1200	84	76.0	3.0	26	-
6 LOLR LOL PLUS LOCK-ON HOSE - RED	32844833	3/8"	9.5	16.0	300	21	1200	84	76.0	3.0	26	-
8 LOLC LOL PLUS LOCK-ON HOSE - GRAY	32844703	1/2"	12.7	19.6	300	21	1200	84	127.0	5.0	26	-
8 LOLG LOL PLUS LOCK-ON HOSE - GREEN	32844708	1/2"	12.7	19.6	300	21	1200	84	127.0	5.0	26	-
8 LOLB LOL PLUS LOCK-ON HOSE - BLUE	32844713	1/2"	12.7	19.6	300	21	1200	84	127.0	5.0	26	-
8 LOLA LOL PLUS LOCK-ON HOSE - BLACK	32844829	1/2"	12.7	19.6	300	21	1200	84	127.0	5.0	26	-
8 LOLR LOL PLUS LOCK-ON HOSE - RED	32844834	1/2"	12.7	19.6	300	21	1200	84	127.0	5.0	26	-
10 LOLC LOL PLUS LOCK-ON HOSE - GREY	32844704	5/8"	15.9	24.0	300	21	1200	84	152.0	6.0	26	-
10 LOLG LOL PLUS LOCK-ON HOSE - GREEN	32844709	5/8"	15.9	26.0	300	21	1200	84	152.0	6.0	26	-
10 LOLB LOL PLUS LOCK-ON HOSE - BLUE	32844714	5/8"	15.9	24.0	300	21	1200	84	152.0	6.0	26	-
10 LOLA LOL PLUS LOCK-ON HOSE - BLACK	32844830	5/8"	15.9	24.0	300	21	1200	84	152.0	6.0	26	-
10 LOLR LOL PLUS LOCK-ON HOSE - RED	32844835	5/8"	15.9	24.0	300	21	1200	84	152.0	6.0	26	-
12 LOLC LOL PLUS LOCK-ON HOSE - GRAY	32844705	3/4"	19.1	26.9	300	21	1200	84	178.0	7.0	15	-
12 LOLG LOL PLUS LOCK-ON HOSE - GREEN	32844710	3/4"	19.1	26.9	300	21	1200	84	178.0	7.0	15	-
12 LOLR (3/4" RED COVER)	32844826	3/4"	19.1	26.9	300	21	1200	84	178.0	7.0	15	-
12 LOLA LOL PLUS LOCK-ON HOSE - BLACK	32844831	3/4"	19.1	26.9	300	21	1200	84	178.0	7.0	15	-

Recommended For: Petroleum-base hydraulic oils, water, glycol antifreeze solutions, Engine lubricating oils, and air. NOTE: Lock-On hose and couplings are not recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Not recommended for gasoline or diesel fuels.

Tube: Black, oil resistant, synthetic rubber highly resistant to oil & heat (Nitrile).

Reinforcement: One Braid, high tensile synthetic textile cord.

Cover: Oil and abrasion resistant synthetic rubber. Available in black Polychloroprene (LOLA), blue (LOLB), green (LOLG), red (LOLR), yellow (LOLY) and grey (LOLC) colors. Note: Black cover only meet "MSHA 2G"

Temp. Range: -40°C to +100°C

MINE MASTER™ LONGWALL EMULSION 1000 HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
48 BLACK EMULSION RETURN HOSE	36193808	3"	76.2	99.3	1000	69.0	4000	276	508	20.0	10	-

Recommended For: Flexible connections in high-pressure water distribution and emulsion systems used in a variety of industries. The thick cover meets MSHA's self-extinguishing requirements, and is designed for the tough mining environment.

Tube: Type A (Chloroprene). Black.

Reinforcement: 2 Braids of high-tensile steel wire.

Cover: Type C2 (Modified Nitrile). Yellow. Type C2 (Specially compounded elastomer). Black with yellow stripe.

Temp. Range: -40°C to +100°C

FLEXMORE 250

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
16 FLEXMORE-250 BAR	46575142	1"	25.4	37.6	3600	248	14400	993	203	8	-	-

Recommended For: Petroleum based hydraulic fluid, meet or exceed requirement of EN853 2SN with higher flexibility. Specially designed for water well rigs.

Tube: Black oil resistant synthetic rubber, (Nitrile - Type C)

Reinforcement: Two braids of high tensile steel wire.

Cover: Black, abrasion resistant synthetic rubber (Modified Nitrile)

Temp. Range: -40°C to+100°C

Recommended Coupling GB & MC

Note: MEETS FLAME RESITANCE ACCEPTANCE DESIGNATION "MSHA"

WATER JET HOSE

PRODUCT DESCRIPTION	PRODUCT NO.											METER ROLL
		(in)	(mm)	(mm)	(psi)	(Bar)	(psi)	(Bar)	(mm)	(in)	(in HG)	Mts
8 WATERJET 1100 HOSE	46511774	1/2"	12.7	24.6	16000	1100	40000	2760	229	9.0	-	-

Recommended For: Ultra high pressure water blasting applications, not to use for Hydraulic application.

Tube: Black, oil resistant, synthetic rubber (Nitrile - type C).

Reinforcement: Four spirals of very high tensile steel wire.

Cover: Black, oil resistant, synthetic rubber [Neoprene -type A) Impulse tested for more than 25,000 cycles at 15,000 psi pressure to ensure good service life.

Temp. Range: -20°C to +70°C

CHEMICAL RESISTANCE TABLE

The Chemical Resistance Table was compiled for use as a guide in selecting the most satisfactory hose tube and cover stocks for specific chemical applications. The data included are the best available to us at this time and will be revised as additional test information is obtained. It is always advisable to test rubber stocks under actual application conditions whenever possible.

We recognize that much of the material contained in this resistance table must be, to a degree, general in nature. Factors such as method of compounding, temperature, chemical concentrations, conditions of exposure, etc., can appreciably affect polymer behavior.

For certain applications, hoses designed for these applications must be used; therefore, the choice of tube stocks is restricted. These applications are:

Steam — Hose from the Steam Hose line

Edible Products — FDA, 3A, USDA

Concentrated Chemicals — Hose from the Acid-Chemical Hose line

L.P. Gas — LP Gas Hose only

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

Hydraulic — Hoses from Hydraulic Products Catalog

The nature of certain chemicals is such that Gates cannot offer a suitable hose to handle them.

Many of the common chemicals are included in the Chemical Resistance Table. If they are not listed, please contact Hose/Connectors Product Application, Denver.

NOTE: Before using a Gates hose to convey a chemical not listed in this Chemical Resistance Table, contact Denver Product Application for a recommendation. Phone (303) 744-5070. Email: fppasupport@gates.com

Hose Selection Procedure:

1. Identify the...

   Size of Hose required.

   Temperature of material being conveyed and environmental temperature.

   Application conditions/requirements such as vibration, flexing, abrasion.

   Material being conveyed.

   Pressure of operation and maximum obtainable in the system including "spikes" and pump/valve ratings.

   End Requirements, what type of terminations.

   Delivery of the product.

2. Locate the material being conveyed in the chemical resistance chart and identify potential tube materials. For intermittent contact or transfer service, make note of all tube materials with a **1** or **2** rating. For continuous contact applications make note of tube materials with a 1 rating only.
3. Use the Industrial Hose Catalog, Industrial Hose Finder, or Hydraulic Hose Catalog to select hoses that have satisfactory working pressure ratings.
4. Verify maximum and minimum operating temperatures.
5. Select the hose that has the best chemical resistance rating (i.e. 1 is Preferred, 2 is Acceptable).
6. Select the proper coupling for the hose chosen from the Industrial Hose Catalog.

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

CHARACTERISTICS AND RESISTANCE INFORMATION FOR HOSE TUBE AND COVER COMPOUNDS

These ratings are for normal or usual range of the specified compounds. Many are also modified to meet the needs of specific applications. See notes below.

Elastomer	Poly Chloroprene	Acrylonitrile Butadiene	Natural Rubber or Styrene Butadiene	Polyvinyl Chloride (plasticized)	Isobutylene & Isoprene	Chlorinated Polyethylene	Cross Linked Polyethylene	Ultra high Molecular Weight Polyethylene	Chlorosulfonated Polyethylene	Ethylene Propylene Diene	Fluorinated Polyethylene	Polyurethane	FluoroCarbon Fluoroelastomer	Polyamid Resins
Common Name or Trade Name	Chloroprene	Buna-N Nitrile	Gum Rubber, Buna-S	PVC	Butyl	CPE	Gatron™	UHMWPE	Hypalon®	EPDM	FEP	Urethane	FKM Viton® Fluorel®	Nylon
ASTM	CR	NBR	NR or SBR	-	IIR	CM	XLPE	UHPE	CSM	EPDM	FEP	EU	FKM	PA
Physical Strength	Good	Good	Excellent	Fair to Good	Fair to Good	Good	Good	Very Good	Good to Excellent	Good	Very Good	Excellent	Good	Good
RESISTANCE TO														
Abrasion	Good to Excellent	Fair to Good	Excellent	Good to Excellent	Fair to Good	Good	Good	Excellent	Good to Excellent	Good	Excellent	Excellent	Good to Excellent	Good to Excellent
Weather/Ozone	Good to Excellent	Poor	Poor to Fair	Excellent	Excellent	Good	Excellent	Good	Excellent	Excellent	Excellent	Fair to Good	Excellent	Excellent
Gas Permeation	Good	Good to Excellent	Good	Good	Excellent	Good	Good	Excellent	Good to Excellent	Fair to Good	Excellent	Fair to Good	Good	Excellent
Petroleum Oils	Excellent	Excellent	Poor	Good to Excellent	Poor	Good	Excellent	Excellent	Good to Excellent	Poor	Excellent	Good	Excellent	Excellent
Gasolines	Fair to Good	Excellent	Poor	Fair	Poor	Good	Excellent	Excellent	Fair	Poor	Excellent	Fair	Excellent	Excellent
High Temperatures	Good	Good to Excellent	Fair	Poor	Excellent	Excellent	Good	Fair	Good to Excellent	Excellent	Excellent	Fair	Excellent	Good
Low Temperatures	Fair to Good	Fair to Good	Good	Poor	Good	Good	Fair to Good	Fair	Fair	Fair to Good	Good	Excellent	Good	Excellent

PHYSICAL PROPERTIES AFTER EXPOSURE TO OIL		
	VOLUME CHANGE MAXIMUM	TENSILE STRENGTH RETAINED
Class A (High Oil Resistance)	+25%	80%
Class B (Medium Oil Resistance)	+65%	50%
Class C (Limited Oil Resistance)	+100%	40%

A2	White food-grade Chloroprene, complies with FDA (tube)
B1 B2	Proprietary for special applications. Contact Denver Hose Product Application
C2	Modification of Nitrile with increased ozone resistance (tube and cover)
C3	Modification to Nitrile tube
C4	Modification of Nitrile with excellent abrasion, tearing & gouging resistance (cover)
D2	White food-grade Natural Rubber, complies with FDA (tube)
D3	Natural Rubber
G1	Modified PVC
MQ	Silicone Rubber
P2	Special for Steam Hose applications

NOTE: Tube and cover compounds with the same name or Gates Type can differ between hoses. Compounds are designed for specific hose application requirements. Refer to the hose product sheet for recommended applications and restrictions. Example: Petroleum Transfer Hose Longhorn (Type C Nitrile) has a different Nitrile tube compound than Fuel Line 4219G (Type C Nitrile). Please read and observe all warnings in the front of this catalog.

GATES CHEMICAL RATING SYSTEM

NOTE: Ratings are for the effect on the ***polymer only.***

"1" Preferred: Constant Contact— This chemical is expected to have minor or no effect on the Polymer. Hose approved for continuous contact. Environmental changes such as temperature, concentration, etc., may promote increased degradation.

"2" Acceptable: Intermittent Contact — This polymer should give reasonably satisfactory service. Due to the nature of this chemical, and under prolonged continuous exposure, the rubber may show minor to moderate deterioration and/or solution discoloration. Hose intended for transfer service only and should be drained after each use. Environmental changes such as temperature, concentration, etc., may promote increased degradation.

"X" Not Recommended —The polymer is unsatisfactory for this chemical and should not be used.

"-" (Dash) —Insufficient or no data available for this material. Testing is advised.

NOTE 1. The above ratings as applied to the Chemical Resistance Table are intended as guides only. They are compiled from the best data available to us. Ratings shown in the table are based on 100% concentrated or saturated solutions, unless otherwise noted, and up to 100 F (+38°C), unless otherwise stated.

NOTE 2. If unusual conditions exist, a polymer test in the fluid is suggested.

NOTE 3. Where a chemical listed in the Resistance Table is soluble in a solvent other than water, the solvent should also be checked for its suitability with the polymer.

NOTE 4. Discoloration of fluids conveyed in the hose. There are no generally accepted standard tests for measuring or rating discoloration of fluids passing through a hose. The amount of discoloration that can be tolerated is usually established by the user on the basis of application. Obviously, products such as paint must be conveyed through a hose that has very good non-discoloring characteristics. If the product is not visually affected, then the hose is satisfactory. For some products, the discoloration may be objectionable from a visual standpoint. Also, the concentration of the particles causing the discoloration may be objectionable if they affect the final use of the product.

Some of the more common methods of checking discoloration are:

1. Allowing the fluid to remain in a sample piece of hose for a specific period and expected operating temperature, then inspecting visually for discoloration.
2. Testing fluid as in No. 1 above and then passing it through filter paper to check foreign content.
3. A more refined test can be made with a spectrophotometer. This instrument measures light transmission through the fluid before and after immersion tests with rubber stocks. This gives a relative rating expressed in percent, the original fluid being rated at 100%.

If discoloration of the product becomes a serious problem for a specific application, contact Denver Product Application for a recommendation. Phone (303) 744-5070.

NOTE 5. Fluid permeation through the tube wall needs to be considered. A tube material may show no sign of degradation, however hose failure can occur if material permeates through the tube to degrade adhesive layers or reinforcement.

Hose Coupling Material — Gates recommends hose couplings made of six materials: Iron or Carbon Steel, 304SS, 316SS, Aluminum, Brass and Polypropylene. The Chemical Resistance Table includes columns showing the suitability of a specific coupling material for the chemicals listed. In most instances, at least one coupling material is rated for each chemical. For certain chemicals, other metallic alloys or plastics than those shown in the table are required. These are generally available from other coupling manufacturers, but are not stocked by Gates.

CHEMICAL RESISTANCE

DRIVEN BY POSSIBILITY™

Contact Denver Product Application for recommendations for chemicals not listed.
Phone (303) 744-5070

1 = Preferred - Constant Contact
2 = Acceptable - Intermittent Contact
X = Not Recommended
– = No Data

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

		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
A																						
Absorption Oil	Liquid	1	2	2	X	X	1	X	X	2	X	1	2	1	1	-	-	-	-	-	1	-
Acetal	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	X	-	1	-	-	-	-	-	-	1	-
Acetaldehyde	Colorless Liquid	1	1	1	1	X	2	2	X	1	X	X	1	X	X	1	1	1	1	1	1	1
Acetamide	Liquid above 176°F(80°C	)	1	1	2	1	2	2	X	X	2	2	X	-	1	-	-	-	2	-	1	X
Acetic Acid (40% or less)	Clear Colorless Liquid	1	1	1	1	1	X	2	X	2	1	X	2	1	-	-	X	2	2	2	X	2
Acetic Acid (56% or less)	Clear Colorless Liquid	1	1	1	1	1	X	2	X	2	1	X	2	1	X	2	X	2	2	2	X	2
Acetic Acid (85% or less)	Clear Colorless Liquid	1	1	1	X	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	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	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	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	1	-	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetone (Dimethylketone)	Colorless Liquid	1	1	1	1	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	2	-	X	X	-	2	-	-	2	-	-	-	-	-	-	-	-
Acetonitrile (Methyl Cyanide)	Colorless Liquid	1	1	2	1	X	X	2	2	2	2	-	2	1	-	1	-	-	-	-	-	-
Acetophenone	Colorless Liquid	1	2	2	2	1	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-	2
Acetyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Acetyl Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetyl-P-Toluidine (In Ether or Alcohols)	In Alcohol or Ether	1	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	-	X	1	-	X	1	X	-	-	-	-	-	X
Acetylene Tetrachloride (Tetrachloroethane)	Colorless Liquid	1	X	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	-
Acrolein (Hydroquinone Inhibited)	Colorless to Yellow Liquid	1	1	1	2	X	-	-	-	-	2	X	-	-	-	-	-	-	-	-	-	-
Acrylamide	Colorless Crystals	1	1	2	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylates (HEA or HPA)	Colorless Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Acrylic Acid	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-
Acrylic Acid (Glacial 97%)	Colorless Liquid	1	1	1	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Acrylic Emulsion	Liquid	1	1	1	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	Colorless Liquid	1	2	2	1	X	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Adipic Acid (70°F)	White Crystals	1	1	X	1	1	X	X	1	X	-	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	1	2	X	1	1	1	1	1	X	2	1	1	1	1	1	-
Air, 257°F (125°C)	Colorless Gas	1	1	X	1	1	X	X	X	2	1	1	1	1	X	X	-	-	-	-	-	-
Air, 300°F (149°C)	Colorless Gas	1	1	X	1	1	X	X	X	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	1
Aircraft Hyd. Oil AA	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Alachlor (Lasso)	Colorless Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-
Alkaline Liquid (NOS)	In Water Solutions	1	1	1	1	1	-	-	-	-	1	2	-	1	-	-	-	-	-	-	-	-
Alkyaryl Polyether	Alcohol	-	1	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
Alkyd Resin (Thermosetting Polymer)	Varies	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkylaryl Sulfonate (Alkylbenzene Sulfonate)	Powder	1	1	1	-	-	1	-	1	-	-	1	X	1	-	-	1	1	-	-	-	-
Allomalaic Acid (Fumaric Acid) Solution	Liquid	1	1	-	-	2	1	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-
Allyl Alcohol	Colorless Liquid	1	1	1	1	1	1	-	1	1	1	1	1	1	X	X	-	-	-	-	-	-
Allyl Bromide	Colorless to Yellow Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allyl Chloride	Colorless Liquid	1	1	X	X	X	X	X	X	X	X	1	-	2	1	X	-	1	1	-	-	2
Alpha Methylstyrene	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	-	X	1	X	-	-	-	-	-	-
Alpha Olefin Sulfonate	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

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		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Alpha Picoline	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alum (Aluminum Sulphate or Other)	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	X	-	-	X	X	2	X	X	1
Alum, Potash (Aluminum Potassium Sulfate)	White Crystals	1	-	-	-	-	-	-	1	-	-	-	-	X	-	-	X	2	2	X	X	1
Alumina - Calcined (Conveyed Pneumatically)	Granular	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Alumina Trihydrate (Conveyed Pnuematically)	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	X	1	X	X	X	X	-	-	-	-	-	-
Aluminum Bromide	White to Yellow Crystals	1	1	-	-	1	1	1	1	1	1	1	1	-	-	-	X	2	2	-	X	-
Aluminum Chloride Solution	White to Yellow Solution	1	1	X	1	1	1	1	1	-	1	1	-	1	-	-	X	2	2	X	X	1
Aluminum Chloride, Anhydrous	White to Yellow Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum Chlorohydrate Solution (Up to 50%)	White Solution	1	1	1	1	1	1	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Aluminum Fluoride	White Crystals	1	1	-	-	-	-	-	1	1	-	-	-	-	-	1	X	2	2	2	X	1
Aluminum Formate (Di & Tri In Water)	In Hot Water	1	1	1	1	1	1	X	X	-	1	1	-	1	-	-	-	-	-	-	-	-
Aluminum Hydroxide (Alumina Trihydrate)	In Mineral Acid or Caustic Soda	1	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	-	1	X	1	1	2	-	1
Aluminum Phosphate Solution	In HCl or HNO3 (slightly soluble)	1	1	1	-	-	X	X	X	X	-	1	-	-	X	X	-	-	-	-	-	-
Aluminum Salts	Varies	1	1	-	-	1	1	1	1	1	1	-	1	-	-	1	-	2	2	2	-	1
Aluminum Sulfate	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Aluminum Sulfate Solution	In Water	1	1	1	1	1	1	1	1	-	1	1	-	1	-	-	X	X	2	X	X	1
Aluminum Sulfate Solution (49.7% H2O)	Liquid	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	X	X	2	X	X	1
Amines (A class of Organic Compounds)	Varies	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Aromatic - IE P-Toluidine)	White Plates (Solid)	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Mixed)	Varies	1	2	1	-	2	2	2	2	2	2	X	-	-	-	-	-	1	-	X	X	-
Amines (Primary, Secondary, Tertiary, Etc)	Varies	1	2	1	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Aminodiphenylamine	Purple Powder	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aminoethanol (Ethanolamine)	Colorless Viscous Liquid	1	2	1	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Aminoethylethanolamine	Liquid	1	2	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-
Ammonia (Anhydrous)	Gas or Liquid	NO HOSE AVAILABLE															-	-	-	-	-	-
Ammonia (Aqueous up to 30% NH3)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	-	1	1	-	X	1
Ammonia Liquor	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammoniated Fatty Acid (ie Ammonium Caprylate)	Liquid above 167°F (75°C)	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ammonium Acetate	In Water	1	1	1	1	1	1	1	1	2	1	1	-	1	2	1	-	1	1	-	X	1
Ammonium Bicarbonate	White Crystals	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1
Ammonium Bisulfate (50%)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Ammonium Carbonate	Colorless to White Powder	1	1	-	-	-	X	-	1	2	-	-	-	-	-	1	1	1	1	-	-	1
Ammonium Chloride	White Crystals	1	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	2	2	-	X	1
Ammonium Chloride Solution	Liquid	1	1	-	-	1	2	1	1	X	1	-	1	1	X	1	-	2	2	-	X	1
Ammonium Flouride	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Hydroxide (16%, 20%, 26%, & 30%)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	2	-	-	-	-	2	1	1	-	X	1
Ammonium Hydroxide (up to 30% NH3)	Colorless Liquid	1	1	1	1	1	2	X	2	2	2	2	1	1	X	X	2	1	1	-	X	1
Ammonium Metaphosphate	White Powder	1	1	-	-	1	2	2	2	2	1	-	2	-	-	2	1	1	1	X	-	1
Ammonium Nitrate	Colorless Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Fertilizer (20.5% N, or 33.5% N	Aggregate	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Prills and Oil	Aggregate	1	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Solution (up to 83%)	Liquid	1	1	1	1	1	1	-	1	1	-	1	1	1	1	-	1	1	1	2	X	1
Ammonium Nitrite	Colorless Crystal	1	1	-	-	-	X	X	X	2	-	-	-	1	-	-	-	1	1	-	-	1
Ammonium Persulfate	Solution in Water	1	1	-	-	-	X	-	-	X	-	X	-	-	-	-	-	1	1	-	X	X
Ammonium Phosphate	White Crystals or Powder	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	-	1

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Ammonium Phosphate Solutions	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	X	2	1	X	-	1
Ammonium Polysulfide Solution	Yellow Solution	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Sulfate	Gray to White Crystals	1	1	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	X	X	1
Ammonium Sulfide	Yellow Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	X	1
Ammonium Sulfide Solution (40-44% or less)	Liquid	1	1	-	-	1	2	1	1	-	1	1	1	1	-	1	1	1	1	X	X	1
Ammonium Thiocyanate (50-60% less)	In Water	1	1	1	1	1	1	1	1	1	-	1	1	1	-	-	1	1	1	-	-	1
Amyl Acetate (Banana or Pearl Oil)	Colorless Liquid	1	1	1	-	2	X	X	X	X	2	X	X	X	1	X	X	1	1	X	1	X
Amyl Alcohol	Colorless Liquid	1	2	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-
Amyl Chloride (Chloropentane)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	1	1	-	-	X
Amyl Chlorides (mixed)	Straw to Purple Liquid	1	2	2	X	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	-	X
Amyl Chloronaphthalene	-	1	1	2	X	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	2	-	-	-	-	-	-	-	-
Amylbenzene (sec amylbenzene)	Clear Liquid	1	2	2	X	X	2	X	X	2	X	1	-	-	-	-	-	-	-	-	-	-
Anethole (anise camphor)	White Crystals/Liquid 73°F(23°C)	1	2	-	-	-	X	X	X	X	X	1	X	X	X	-	2	1	1	2	X	1
Anhydrous Ammonia (R 717)	Gas or Liquid	NO HOSE AVAILABLE															-	-	-	-	-	-
Aniline	Colorless Oily Liquid	1	2	X	1	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Aniline Dyes	-	1	1	-	1	2	X	X	X	X	2	2	X	2	-	-	X	1	1	-	-	2
Aniline Hydrochloride	White Crystals	1	1	-	-	2	2	2	2	X	2	-	-	-	-	-	-	X	X	-	X	2
Aniline Oil (Aniline)	Colorless Oily Liquid	1	2	X	1	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Animal Fat (Lard)	White Solid/Liquid > 108°F(42°C)	1	1	1	X	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	2	-	-	-	-	-	-	-	-
Animal Oils	Solid to Liquid	1	-	-	2	-	1	-	-	2	-	-	-	1	1	1	1	1	1	1	-	-
Ant Oil (Furfural)	Colorless to Reddish Brown Liquid	1	1	-	2	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2
Antifreeze (Glycol Base)	Liquid	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Antimony Chloride (50%)	White Powder	1	1	1	-	-	-	-	-	-	2	1	-	-	1	1	X	X	X	-	-	1
Antimony Pentachloride	Reddish-Yellow Liquid	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Antimony Salts	White Crystal	1	1	-	-	1	2	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-
Aqua Ammonia (Ammonium Hydroxide) (30%)	Colorless Liquid	1	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	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	1	-	-	-	-	-	-
Aromatic Hydrocarbons	Typically Colorless Liquids	1	2	2	X	X	2	X	X	X	X	1	X	X	1	X	1	1	1	2	2	-
Arsenic Acid	In Water	1	1	1	2	2	-	X	X	-	2	1	-	1	-	-	2	-	1	2	-	2
Arsenic Trioxide	In Acid	1	1	1	2	X	2	X	X	2	X	1	X	-	-	1	-	-	-	-	-	-
Askarel (Transformer Oil)	Varies	1	2	2	X	X	X	X	X	X	X	1	X	1	1	X	1	1	1	-	1	2
Asphalt	Varies	1	2	X	X	X	2	X	X	-	X	1	-	-	X	X	1	1	1	-	1	-
Asphalt (Blown)	Black Solid	-	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphalt (Cut Back)	Black Liquid	1	X	X	X	X	2	X	X	2	X	1	X	X	2	X	1	1	1	-	1	-
Asphalt Emulsion	Black Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphalt Paint	Black Liquid	1	2	X	X	X	2	X	X	-	X	1	X	-	2	X	-	-	-	-	-	-
Asphaltene	In Carbon Disulfide	1	2	X	X	X	2	X	X	2	X	1	X	X	1	-	-	-	-	-	-	-
ASTM Oil No. 1	Brown Liquid	1	1	1	2	X	1	X	X	1	X	1	2	1	1	2	1	1	1	1	1	2
ASTM Oil No. 2	Brown Liquid	1	1	1	X	X	1	X	X	2	X	1	2	1	1	X	1	1	1	1	1	X
ASTM Oil No. 3	Brown Liquid	1	1	1	X	X	1	X	X	X	X	1	X	1	1	X	1	1	1	1	1	X
ASTM Reference Fuel A	Liquid	1	1	1	2	X	1	X	X	1	X	1	1	1	1	2	1	1	1	1	1	X
ASTM Reference Fuel B	Liquid	1	2	1	X	X	1	X	X	2	X	1	X	2	1	X	1	1	1	1	1	X

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
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ASTM Reference Fuel C	Liquid	1	2	2	X	X	2	X	X	X	X	1	X	2	1	X	1	1	1	-	1	X
ATF (Automatic Transmission Oil)	Liquid	1	1	1	X	X	1	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-
B																						
Baltic Types 100, 150, 200, 300, 500	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	2
Banvel (Ag Spray, Concentrated)	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
Bardol B	Dark Colored Liquid	1	1	-	-	X	X	X	X	X	X	2	X	-	-	-	1	1	1	-	-	-
Barite (Natural Barium Sulfate)	White to Yellowish Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	2	1
Barium Carbonate	White Powder	1	1	-	-	X	1	X	1	1	X	1	X	1	-	1	2	1	1	-	1	1
Barium Chloride	Colorless Crystals	1	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	1	1	-	2	1
Barium Hydroxide	White Powder	1	1	1	-	1	1	X	1	1	1	-	1	1	-	X	2	1	1	-	-	1
Barium Sulfate	White to Yellowish Powder	-	-	-	-	-	-	-	1	-	-	-	-	X	-	-	1	1	1	-	2	1
Barium Sulfide	Yellowish Green to Gray Powder	1	1	1	-	-	-	-	1	-	-	1	-	1	-	-	X	1	1	-	X	1
Basic Copper Arsenate	Blue to Green Powder	1	1	-	-	-	-	2	1	-	-	1	2	-	-	1	1	1	1	-	-	-
BBP (Butyl Benzyl Phthalate)	Clear Oily Liquid	1	-	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Beer	Yellow Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beet Sugar Liquors	Colorless Solution	1	1	1	1	1	1	1	1	1	1	1	1	1	1	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	2	X	X	X	X	2	X	X	X	2	X	1	-	-	1	-	1
Benzene (Benzol)	Colorless to Yellow Liquid	1	2	2	X	X	X	X	X	X	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	1	2	X	X	X	X	2	1	2	1	-	X	-	-	-	-	-	-
Benzoic Aldehyde (Benzaldehyde)	Colorless to Yellow Liquid	1	1	1	2	2	X	X	X	X	2	X	X	2	2	X	1	-	-	1	-	1
Benzol (Benzene)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	X
Benzophenone	White Powder	1	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Benzotrichloride	Colorless to Yellow Liquid	1	-	-	X	X	X	X	X	X	X	1	-	X	2	X	-	-	-	-	-	-
Benzyl Acetate	Water White Liquid	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl Alcohol	Water White Liquid	1	1	1	1	2	X	X	X	X	1	1	X	1	X	1	-	-	-	-	-	-
Benzyl Alcohol, Photo Inhibited	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	1
Benzyl Benzoate	Water White Liquid	1	1	-	-	2	-	-	-	-	2	1	-	-	-	-	1	1	1	-	-	-
Benzyl Chloride	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	-	X	2	X	1	-	-	-	-	-
Bicarbonate of Soda	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bio-Diesel (B100)	Liquid below 125°F (52°C)	1	2	2	-	-	2	-	-	-	-	1	2	2	1	X	2	2	1	1	2	1
Bio-Diesel (B100)	Liquid 125°F (52°C) and Above	1	X	X	X	X	X	X	X	X	X	1	X	X	1	X	2	2	1	1	2	1
Bismuth Carbonate	White Powder	1	-	-	-	-	-	-	1	X	-	-	-	-	-	-	1	1	1	-	-	1
Bisphenol A	White Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bitumastic	Liquid	1	-	X	-	X	2	X	X	2	X	2	X	2	-	-	1	1	1	-	1	-
Black Liquor (RXN Product Pulpwood+NaOH)	Black Alkaline Liquid	1	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Black Sulfate Liquor (See "Black Liquor")	Black Alkaline Liquid	1	1	1	1	2	2	X	X	2	2	1	2	X	-	1	1	1	1	-	-	1
Blast Furnace Gas (Cooled)	Gas	1	1	-	-	-	X	X	X	X	X	1	X	2	-	X	1	1	1	-	1	-
Bleach (Chlorinated Lime)	White Powder (35-37% Cl)	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bleach Liquor (Calcium Hypochlorite/H2O)	Clear Solution	1	1	1	1	2	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Borax (Sodium Borate)	White Crystals	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Bordeaux Mixture (Slaked Lime &Copper Sulfate)	In Water	1	1	1	1	1	1	2	2	2	1	1	-	-	-	1	-	1	1	-	-	-
Boric Acid	White Powder or Colorless Scale	1	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	2	1	1	X	1
Boric Oxide	Colorless Powder	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-
Brake Fluid (Petroleum Base)	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	1	1	2	1	1	1	-	1	X
Brake Fluid (Synthetic) DOT2, DOT3, DOT4	Liquid	1	1	-	1	1	X	X	X	X	1	X	X	1	-	2	1	1	1	-	1	-

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Brine (Salt)	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Bromine	Dark Reddish Brown Liquid	1	-	-	X	X	X	-	-	X	-	1	-	-	X	X	1	1	1	1	1	-
Bromobenzene	Colorless Liquid	1	-	-	X	X	-	X	X	-	X	1	-	-	-	X	-	-	-	-	-	-
Bromochloroethane	Colorless Liquid	-	-	X	X	X	-	X	X	-	X	X	-	X	X	-	-	-	-	-	-	-
Bromochloromethane (Chlorobromomethane)	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	-	1	X
Bromotoluene	Clear Liquid	1	-	-	X	X	-	X	X	-	X	1	-	X	-	X	-	-	-	-	-	-
Bubble Bath Compounds	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bunker Oil	Liquid	1	2	2	X	X	1	X	X	2	X	1	X	-	1	X	1	1	1	1	1	-
Butadiene (1,3)	Gas	1	1	-	X	X	2	X	X	X	X	1	X	-	1	X	-	1	1	-	1	1
Butanal (Butyraldehyde)	Water White Liquid	1	2	-	-	X	X	X	X	X	X	X	X	2	-	-	-	-	-	-	1	-
Butandiol (Butylene Glycol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-
Butane (Gas)	Colorless Gas	USE LPG HOSE ONLY															-	-	-	-	-	-
Butane (Liquid)	Liquid	USE LPG HOSE ONLY															-	-	-	-	-	-
Butanol (Butyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1
Butter	Yellow/White Semi-Solid/Liquid	-	-	-	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Butter Oil (Use FDA Hose)	Yellow to white Liquid	1	-	-	2	-	-	X	X	2	-	-	-	-	-	-	1	1	1	1	1	-
Butyric Acid	Colorless Liquid	1	1	1	1	2	-	2	2	X	2	1	X	1	X	-	-	-	-	-	-	-
Butyl Carbitol (Diethylene Glycol Butyl Ether)	Colorless Liquid	1	1	-	2	2	2	X	X	2	2	1	-	1	-	-	1	1	1	1	1	-
Butyl Cellosolve (EG Monobutyl Ether)	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Butyl "OxitolTM" for EG Monobutyl Ether	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Butyl Acetate	Colorless Liquid	1	2	2	1	X	X	X	X	X	2	X	X	2	1	1	2	1	1	1	1	X
Butyl Acrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Butyl Alcohol (Butanol)	Colorless Liquid	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1
Butyl Aldehyde	Water White Liquid	1	-	-	-	2	X	-	-	X	-	X	X	2	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate (BBP)	Clear Oily Liquid	1	-	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Butyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Butyl Ether	Colorless Liquid	1	1	-	-	-	2	X	X	2	2	X	-	1	-	-	1	1	1	1	1	-
Butyl Ethyl Ether (Ethyl-n-Butyl Ether)	Liquid	1	-	-	-	-	2	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Butyl Formate	Colorless Liquid	1	-	-	-	-	X	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Mercaptan (2-Methyl-2-Butanathiol)	Liquid	1	1	-	X	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-	-
Butyl Methacrylate	Colorless Liquid	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Stearate	Colorless Liquid	1	1	-	-	X	2	X	X	X	X	1	-	2	-	1	1	1	1	1	1	-
Butylamine	Colorless Liquid	1	1	-	-	-	X	X	X	X	X	X	X	2	-	-	1	1	1	1	1	X
Butylene Glycol (Butandiol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-
Butyraldehyde (Butanal)	Water White Liquid	1	2	-	-	X	X	X	X	X	X	X	X	2	-	-	-	-	-	-	1	-
Butyric Acid	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	X	1	1	1	X	1	1	1	2	-
Butyric Anhydride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C																						
Cadmium Acetate (Soluble in H2O & Alcohols)	In Water or Alcohol	1	-	-	-	-	X	-	X	-	1	X	-	-	-	-	-	-	-	-	-	-
Cake Alum (Aluminum Sulfate)	White Crystals	1	1	-	1	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Cake Alum Solution (Al Sulphate up to 50%)	In Water	1	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-
Calcine Liquor (Radioactive Waste)	In Water Solution	1	1	-	-	1	1	-	-	-	1	1	-	-	-	-	1	1	1	2	-	-
Calcium Acetate	Powder	1	1	-	-	1	X	2	2	X	1	X	X	1	-	-	1	1	1	1	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

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Calcium Bisulfite (Calcium Hydrogen Sulfite)	Yellow Liquid	1	1	-	-	-	1	2	2	1	1	1	1	1	-	1	-	1	1	-	-	1
Calcium Bromide Solution	In Water or Alcohol	1	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Calcium Carbonate	Solid White Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	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	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	-	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	1	-	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-
Caliche Liquors (Sodium Nitrate)	In Water	1	1	-	-	-	1	2	2	-	1	-	1	-	-	-	-	1	1	-	-	-
Camphene (Liquid above 115°F/46°C)	Liquid above 115°F (46°C)	1	-	-	X	X	-	-	-	-	-	1	X	-	-	-	-	-	-	-	-	-
Cane Sugar Liquors	In Water	1	1	-	1	2	1	2	2	1	2	-	1	1	-	1	1	1	1	1	2	1
Caproic Acid	Colorless or Yellow Liquid	1	1	1	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Caprolactam	White Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprolactam, Molten (Above 156°F/69°C)	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
Caprylic Acid (Octanoic Acid)	Colorless, Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Carbamates	Crystals	1	1	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Carbolic Acid	Liquid above 109°F (43°C)	1	2	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-
Carbolic Acid (Phenol)	White or Pink Crystals	1	2	-	2	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	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	X	1	X	X	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	1	2	X	1
Carbonyl Chloride (Phosgene)	Gas/Liquid	1	X	X	X	X	X	X	X	X	1	1	X	-	2	-	-	-	-	-	-	-
Casein (White amorphous solid)	In Concentrated Acid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Castor Oil	Pale Yellow or Colorless Liquid	1	1	-	-	-	1	X	X	1	2	1	1	1	-	1	1	1	1	1	1	1
Caustic Potash, Dry (Potassium Hydroxide)	White Pellets or Flakes	1	1	-	-	2	X	2	1	2	1	1	1	1	X	X	-	-	-	-	-	-
Caustic Potash, Liquid (up to 45%)	Solution in Water	1	1	1	1	2	2	2	2	-	1	2	-	1	1	1	-	-	-	-	-	-
Caustic Soda, Dry (Sodium Hydroxide)	White Beads or Pellets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Caustic Soda, Liquid (up to 73%)	Solution in Water	1	2	-	1	2	X	1	1	2	2	X	1	1	2	X	-	-	-	-	-	-
Cellosolve Acetate (Eg Ethyl Ether Acetate)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	X	-	1	1	1	1	-	-	1
Cellosolve Butyl (Eg Butyl Ether)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Cellulose	Solid, Many Forms	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-
Cement, Portland	Gray Powder	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
China-Wood Oil (Tung Oil)	Yellow Oil	1	2	-	X	X	2	X	X	X	X	1	2	-	-	2	1	1	1	1	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	-	X	1	X	X	1	X	-	-	-	-	-	-
Chlorine	Gas	NO HOSE AVAILABLE															-	-	-	-	-	-
Chlorine Liquid (Liquid @ 210PSIG @ 120°F/(38°C)	Clear Amber Liquid	1	-	-	-	X	-	-	-	-	-	1	-	-	X	X	-	-	-	-	-	-
Chlorine Trifluoride	Pale Green Liquid	1	-	-	-	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Chlorine Water (.03%/300PPM Chlorine)	Clear, Yellowish Liquid	1	1	1	-	X	-	-	-	-	-	1	-	-	-	-	-	X	X	-	-	1
Chloroacetic Acid (Monochloroacetic Acid)	Powder or White Crystals	1	1	X	X	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
Chloroacetic Acid (Under 100°F/38°C)	Solid	1	1	1	X	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
Chloroacetic Acid Solution	In Water, Alcohol, Ether	1	1	X	1	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1
Chloroacetone	Colorless Liquid	-	-	-	-	1	-	-	-	-	-	X	-	X	-	-	-	-	-	-	-	-
Chloroacetyl Chloride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Chloroaniline	Amber Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene (Phenyl Chloride) (Monochlorobenzene)	Clear Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	X
Chlorobromomethane (Bromochloromethane)	Clear Liquid	1	2	X	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	X	1	X	X	X	X	-	-	-	-	-	-
Chloroform	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	X	X	2	X	1	1	1	1	1	X
Chloronapthalene (Chlorinated Napthalene)	Oily Liquid to Solid	1	-	-	-	X	X	X	X	X	X	1	X	X	-	-	-	-	-	-	-	-
Chloropentane (n-amyl chloride)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	1	1	-	-	X
Chlorophenol	In Benzene, Alcohol, Ether	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloropicrin Mixture	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Chloropropylene Oxide (Epichlorohydrin)	Volatile Liquid	1	2	-	X	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	1
Chlorosulfonic Acid	Colorless to Light Yellow Liquid	NO HOSE AVAILABLE															-	-	-	-	-	-
Chlorothene (TM for chlorinated solvents)	Colorless Liquid	1	1	X	-	-	X	-	-	X	-	2	-	-	-	-	-	1	1	-	1	-
Chlorotoluene	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	1	X	X	-	X	1	1	1	1	1	-
Chlorox	Colorless Liquid	1	2	1	-	-	-	2	2	2	2	-	2	1	1	1	-	2	1	-	-	X
Chocolate Syrup	Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Chrome Alum (Chromium Potassium Sulfate)	In Water	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	1
Chromic Acid (100%)	Dark Red Crystals	1	X	2	-	-	-	-	-	-	-	1	-	-	-	X	X	X	X	X	X	-
Chromic Acid (25% Solution or less)	In Water	1	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	2	X	X	1
Chromic Acid (50% Solution with water)	In Water	1	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	2	X	X	1
Chromic Acid (Chromium Trioxide)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1
Chromic Chloride	In Water	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Chromium Trioxide (Chromic Acid)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1
Cider	Liquid	1	-	-	1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Cinene (Dipentene)	Colorless Liquid	1	2	-	X	X	X	X	X	-	-	1	-	-	-	-	-	-	-	-	-	-
Citgo FR Fuels	Liquid	1	1	-	-	1	X	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-
Citric Acid Solution	In Water	1	1	1	1	1	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	-	-	X	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Coal Tar	Black, Viscous Liquid	1	-	-	X	X	2	X	X	2	X	1	X	2	X	X	1	1	1	1	1	-
Coal Tar Pitch (Roofing)	Liquid above 212°F (100°C)	1	-	-	X	X	2	X	X	2	X	1	2	2	-	X	-	-	-	-	-	-
Cobalt Nickel Plating Solution	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	2	-	-	-
Cocoa Butter (Theobroma Oil)	Liquid above 95°F (35°C)	1	1	2	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Coconut Oil	Liquid above 77°F (25°C)	1	-	-	X	2	1	X	X	1	2	1	2	-	1	2	-	-	-	-	-	-
Cod Liver Oil	Pale Yellow Liquid	1	1	-	2	2	X	X	X	X	2	1	X	-	-	-	1	1	1	1	1	-
Coke Oven Gas (Under 300°F/149°C)	Gas	1	1	-	X	X	X	X	X	X	X	1	2	-	-	-	1	1	1	2	-	1
Copper Arsenate (Cupric Arsenate)	In Dilute Acid	1	1	-	-	-	-	2	2	-	-	1	2	-	-	-	1	1	1	-	-	-
Copper Chloride (Cupric Chloride)	In Water	1	1	-	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Copper Cyanide (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Copper Nitrate (Cupric Nitrate)	In Water	1	1	-	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Copper Sulfate (Cupric Sulfate)	In Water	1	1	-	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Copper Sulfide (Soluble in Nitric Acid)	In Nitric Acid	1	-	-	-	-	1	-	X	-	1	1	1	-	-	-	-	-	-	-	-	-
Corn Oil	Pale Yellow Liquid	1	1	-	2	2	2	X	X	2	2	1	X	2	-	1	1	1	1	1	1	X
Corn Syrup (Glucose Syrup)	Clear Liquid	1	2	-	1	2	2	2	2	2	2	2	2	-	-	-	1	1	1	1	-	-
Cottonseed Oil	Liquid, Several Colors	1	1	-	2	2	2	-	-	1	-	1	2	2	-	-	1	1	1	1	1	1
Creosote (high Napthalene/Anthracene)	Liquid	X	2	X	X	-	2	X	X	X	2	1	X	-	-	X	2	1	1	1	X	2
Cresol (Methyl Phenol)	Liquid above 95°F (35°C)	1	2	-	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-	2
Cresylic Acid	Liquid	1	-	-	-	X	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-
Crotonic Acid (Methylacrylic Acid)	White Crystalline Solid	1	1	1	1	2	2	X	X	-	1	1	-	1	X	-	1	X	-	-	-	-
Crude Oil (Crude Petroleum Oil)	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	2	-	1	1	1	1	1	1	1
Crude Wax	Liquid above 200°F (93°C)	1	2	-	-	-	2	-	-	-	2	1	-	-	-	1	1	1	1	-	1	1
Cryolite (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	-	X	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-
Cupric Arsenate (Copper Arsenate)	In Dilute Acid	1	1	-	-	-	-	2	2	-	-	1	2	-	-	-	1	1	1	-	-	-
Cupric Chloride (Copper Chloride)	In Water	1	1	-	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Cupric Cyanide (Copper Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cupric Nitrate (Copper Nitrate)	In Water	1	1	-	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Cupric Sulfate (Copper Sulfate)	In Water	1	1	-	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Cutting Oil (Mineral Oil Base)	Liquid	1	2	-	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	X
Cutting Oil, Sulfur Base	Liquid	2	-	-	-	-	1	-	-	X	-	-	-	-	-	-	1	1	1	-	1	1
Cutting Oil, Water Soluble	Liquid	1	-	-	-	-	1	-	-	X	-	-	-	-	-	-	1	1	1	-	1	1
Cyanide, Copper (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cyanide, Mercuric	In Water	1	1	-	-	2	2	2	2	1	2	-	1	-	-	-	-	-	-	X	-	1
Cyanide, Potassium	In Water	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Cyanide, Silver	In Nitric Acid	1	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Cyanide, Sodium	In Water	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-
Cyclohexane	Colorless Liquid	1	2	1	-	X	2	X	X	X	X	1	X	1	-	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	X	-	X	-	1	1	2	-	X
Cyclohexylamine	Colorless Liquid	-	-	-	-	1	-	X	-	-	1	X	-	-	-	-	-	-	-	-	-	-
Cyclopentane	Colorless Liquid	1	-	-	-	X	2	-	X	2	X	1	X	2	-	-	-	-	-	-	-	-
Cyclopentanol	Colorless Liquid	1	-	-	-	-	2	-	X	-	X	2	X	1	-	-	-	-	-	-	-	-
Cyclopentanone	Water White Liquid	-	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Cymene	Colorless Liquids	1	2	-	-	X	X	X	X	X	X	2	X	2	-	X	1	1	1	1	1	-
Cymene (Isopropyltoluene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	1	1	1	-
D																						
Decalin (TM for decahydronapthalene)	Colorless Liquid	1	2	2	X	X	2	X	X	-	X	1	X	2	1	-	-	-	-	-	1	1
Decanal (Decyl Aldehyde)	Colorless to Yellow Liquid	1	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Decanol (Decyl Alcohol)	Colorless, Water White Liquid	1	-	-	-	-	1	-	X	X	X	2	2	1	-	X	-	-	-	-	-	-
Decyl Aldehyde (n-decanal)	Colorless to Yellow Liquid	1	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Deicing Fluid (ethylene or propylene glycol)	Orange Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	1

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Denatured Alcohol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Detergent Sol. (Sodium dodcylbenzenesulfonate)	In Water	1	2	1	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	X	-	-	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	X	-	1	1	1	1	1	1	2
Dibutylamine	Colorless Liquid	1	-	-	X	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	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	X	1	X	X	-	X	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	Gas, Liquid-140PSIG @ 100°F (38°C)	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Dichloroethane (Ethylene Dichloride)	Colorless Oily Liquid	1	2	2	X	X	X	X	X	X	X	2	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	-	X	1	-	X	1	X	-	-	-	-	-	X
Dichloromethane (Methylene Chloride)	Colorless Liquid	1	1	2	X	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	2	1	X	X	1	X	X	2	X	-	X	-	1	-	1	1	1	1	1	2
Diethanolamine (20%)	In Water or Alcohol	1	-	-	1	2	2	2	2	X	1	1	2	1	1	2	1	1	1	1	X	-
Diethanolamine	Liquid above 83°F (29°C)	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	X	-
Diethyl Ether (Ethyl Ether)	Colorless Liquid	1	2	-	1	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	-
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	-	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	-	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	1
Diethylene Glycol Methyl Ether (Methyl Cellosolve)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether Acetate	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Diethylene Glycol Monoethyl Ether	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether Acetate	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylenetriamine	Yellow Liquid	1	1	1	-	1	-	X	-	X	1	X	X	-	-	-	-	-	-	-	-	-
Dihydroxyacetone	In Water	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dihydroxydiethyl ether (Diethylene glycol)	Colorless Syrupy Liquid	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1
Diisobutyl Ketone	Colorless Liquid	1	1	-	1	1	X	X	X	X	2	X	X	2	1	-	-	1	1	-	1	1
Diisobutyl Phenol (Octyl Phenol)	White Flakes	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisobutyl Phthalate	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisobutylene	Colorless Liquids	1	1	-	X	X	2	X	X	X	X	1	X	2	-	-	-	1	1	-	1	-
Diisodecyl Adipate (DIDA)	Light Colored Oily Liquid	1	-	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diisooctyl Phthalate (DIOP)	Nearly Colorless Liquid	1	-	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diisopropanolamine	Liquid above 108°F (42°C)	1	-	-	-	-	2	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-
Diisopropyl Ketone	Colorless Liquid	1	1	-	1	1	X	X	X	X	2	X	X	-	1	-	-	1	1	-	1	-
Diisopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisopropylbenzene (meta)	Colorless Liquid	1	2	2	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diisopropylidene Acetone (Phorone)	Yellow Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-
Dilauryl Ether	Liquid above 92°F (33°C)	1	1	-	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dimethyl Acetamide (DMAC)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl Aniline	Yellow/Brown Oily Liquid	1	1	-	-	X	X	X	X	X	2	1	X	2	-	-	-	-	-	-	1	-
Dimethyl Ether	Liquid under Pressure	1	1	1	1	1	X	X	X	X	2	X	X	-	-	-	1	1	1	1	1	-
Dimethyl Formamide	Water White Liquid	1	1	-	1	2	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethyl Phthalate	Colorless Oily Liquid	1	1	-	1	2	X	X	X	X	2	1	X	1	-	-	-	-	-	-	1	-
Dimethyl Sulfate (Methyl Sulfate)	Colorless Liquid	1	1	-	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-	-
Dimethyl Sulfide	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Sulfoxide	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Terephthalate	Colorless Crystals	-	-	-	-	-	X	X	-	X	X	1	-	-	-	-	-	-	-	-	-	-
Dimethylamine (DMA)	Liquid @ 70PSIG @ 120°F (49°C)	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminoethanol (Dimethylethanolamine)	Colorless Liquid	1	1	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminomethyl Phenol (DMP)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethylbenzene (DMB)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Dimethylcarbinol (isopropyl alcohol)	Colorless Liquid	1	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Dimethylcyclohexylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylformamide (DMF)	Water White Liquid	1	2	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethylketone (Acetone)	Colorless Liquid	1	1	X	1	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2
Dimethylphenol (Xylenol)	White Solid, Liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrobenzene (Soluble in Chloroform)	In Chloroform	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, Solid	In Alcohol or Ether	1	1	1	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dioctyl Adipate di (2-ethylhexyl) adipate	Light Colored Oily Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dioctyl Phosphite, di-(2-ethylhexyl) phosphite	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Dioctyl Phthalate, di-(2-ethylhexyl) phthalate	Light Colored Liquid	1	1	-	1	X	X	X	X	X	X	1	X	2	-	-	1	1	1	1	1	X
Dioctyl Sebacate, di-(2-ethylhexyl) sebacate	Pale Straw Colored Liquid	1	1	-	1	-	X	X	X	X	2	1	X	X	-	-	-	-	-	-	-	-
Dioctylamine di-(2-ethylhexyl)amine	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIOP (Diisooctyl Phthalate)	Nearly Colorless Liquid	1	-	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Dioxane (Diethylene Dioxide)	Colorless Liquid	1	1	-	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxane (Diethylene Ether)	Colorless Liquid	1	1	-	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxolane (Ethylene Glycol Formal)	Water White Liquid	1	-	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	1	1	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Dipentene (Cinene, Limonene)	Colorless Liquid	1	2	-	X	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Diphenyl Phthalate	Yellow White Powder	1	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropyl Ketone	Colorless Liquid	1	1	-	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dipropylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol Monomethyl Ether (DPM)	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dirco Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Disodium Phosphate (DSP soluble in H2O)	Colorless or White Powder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disodium Phosphate Solution	In Water	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Distillate Fuel Oil	Clear to Brown Liquid	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Divinylbenzene (20-25% or 50-60% Grades)	Water White to Straw Liquid	1	2	-	X	X	X	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
DMA (Dimethylamine)	Gas	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DMAC (Dimethyl Acetamide)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DMB (Dimethylbenzene)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
DMF (Dimethylformamide)	Water White Liquid	1	2	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
DMP (Dimethylaminomethyl phenol)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dodecylbenzene (Detergent Alkylate)	Liquid	1	2	-	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dodecylphenol	Straw Colored Liquid	1	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dolomite	Gray, Pink or White Powder	-	-	-	-	2	1	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-
Dowtherm A (Biphenyl and Biphenyl Ether Mix.)	Liquid	1	1	-	1	1	X	X	X	X	X	1	X	X	-	X	1	1	1	1	1	-
Dowtherm SR-1 (Ethylene Glycol)	Liquid	1	1	1	1	1	1	-	-	-	1	1	-	1	-	-	2	1	1	1	1	1
DPM (Dipropylene Glycol Monomethyl Ether)	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duro Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
E																						
EDB (Ethylene Dibromide)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EDTA (Ethylenediaminetetraacetic Acid)	Colorless Crystals	1	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Emulsion (Oil in Water)	Water is Continuous Phase	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Enamels	Liquid	1	1	-	X	X	-	-	-	-	-	1	-	-	1	2	-	-	-	-	1	-
Epichlorohydrin (Chloropropylene Oxide)	Volatile Liquid	1	2	-	X	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	1
Epoxy Resin	Solid Pellet	-	-	-	-	1	-	-	-	1	2	X	-	-	-	-	-	-	-	-	-	-
Essential Oils	Liquid	1	2	-	X	X	1	X	X	2	-	1	-	-	-	2	1	1	1	1	1	-
Ethanol (Ethyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Ethanolamine (Aminoethanol)	Colorless Viscous Liquid	1	2	1	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Ethers	Liquids	1	1	X	1	1	2	X	X	X	2	X	2	1	-	2	1	1	1	1	1	2
Ethyl Acetate (Acetic Ether)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	2
Ethyl Acetoacetate	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	1	-	-	1	1	1	1	1	X
Ethyl Acrylate	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X
Ethyl Acrylate, Inhibited	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X
Ethyl Alcohol (Ethanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Ethyl Aluminum Dichloride (Above 90°F/32°C)	Clear Yellow Liquid	1	-	-	-	-	X	-	X	-	X	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	-	X	2	1	1	1	2	X
Ethyl Chloroformate (Ethyl Chlorocarbonate)	Water White Liquid	1	-	-	-	X	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethyl Ether (Diethyl Ether)	Colorless Liquid	1	2	X	1	X	X	X	X	X	2	X	X	1	2	X	2	1	1	1	1	1
Ethyl Ether Acetate (Cellosolve Acetate)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1
Ethyl Formate	Water White Liquid	1	-	-	-	2	X	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-

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Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Ethyl Iodide	Colorless Liquid	1	-	-	-	X	X	-	X	X	X	2	X	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	1	2	X	-	-	X	-	X	X	2	1	X	-	-	-	-	-	-
Ethyl Oleate	Light Yellowish Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Oxalate	Colorless Liquid	1	1	-	-	2	X	2	2	X	2	1	-	1	-	-	-	-	-	-	-	-
Ethyl Pentachlorobenzene	-	1	1	-	-	X	X	X	X	X	X	1	X	-	-	-	2	1	1	-	1	-
Ethyl Phthalate (Diethyl phthalate)	Water White Liquid	1	1	-	-	-	X	X	X	-	2	-	-	2	-	-	-	1	1	-	1	-
Ethyl Propionate	Water White Liquid	1	-	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-
Ethyl Propyl Ketone (3-Hexanone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Ethyl Silicate	Colorless Liquid	1	1	-	-	2	1	2	2	1	-	1	-	1	-	-	1	1	1	1	1	-
Ethyl Sulfide (Diethyl Sulfide)	Colorless Oily Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethylamine	Colorless Liquid or Gas	1	2	-	1	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-
Ethylbenzene	Colorless Liquid	1	2	-	-	X	X	X	X	X	X	1	X	2	-	-	1	1	1	-	1	-
Ethylbutanol (2-Ethylbutyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	-
Ethylbutyl Alcohol (Ethylbutanol)	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	-
Ethylbutyl Amine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbutyl Ketone	Clear Liquid	1	1	-	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Ethylbutyraldehyde (Diethylacetaldehyde)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylcellulose Granular Solid	Granular Solid	1	1	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	-	1	-
Ethylene Chlorohydrin	Colorless Liquid	1	1	-	2	X	X	-	-	X	2	1	-	-	X	X	-	-	-	-	-	-
Ethylene Cyanohydrin	Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Dibromide (EDB)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Ethylene Dichloride (Chloroethane)	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	2	X	X	X	X	-	-	-	-	-	-
Ethylene Glycol	Colorless Liquid	1	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	1
Ethylene Glycol Formal (Dioxolane)	Water White Liquid	1	-	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	1	1	-
Ethylene Glycol Monoethylether	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monoethylether Acetate	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	1	2	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol N-Butyl Ether	Colorless Liquid	1	1	-	1	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylenediamine	Colorless Liquid	1	2	-	-	2	1	-	-	-	2	X	-	-	-	-	1	1	-	-	1	1
Ethylenediaminetetraacetic acid (EDTA)	Colorless Crystals	1	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethylhexaldehyde	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexanediol	Colorless Liquid	1	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexanol (2-ethylhexyl alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	-
Ethylhexoic Acid	Liquid	1	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexyl Acetate	Water White Liquid	1	1	-	-	1	X	-	-	X	-	X	X	-	1	-	-	-	-	-	-	-
Ethylhexyl Acrylate	Liquid	1	2	-	2	-	X	-	-	-	-	X	-	-	-	X	-	-	-	-	-	-
Ethylhexyl Alcohol (Ethylhexanol)	Colorless Liquid	1	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	-
F																						
Fatty Acid	Solid, Semisolid or Liquid	1	2	2	2	2	2	X	X	2	2	2	X	2	-	2	2	1	1	1	2	1
Fatty Alcohol, Blend	C8-11 Liquids, > C11 Solids	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	-	-	-	-	-	-
Fatty Petroleum Alcohol	C11 or Less are Liquids	1	1	1	1	1	1	-	-	-	1	1	-	1	1	-	-	-	-	-	-	-
Ferric Bromide	Red Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferric Chloride	Black-Brown Solid	1	1	-	-	-	2	-	1	2	1	1	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

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
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	1
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	-	1	2	1	1	1	1	1	1
Finishing Oil	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire-Resistant Hydra-Fluid (Texaco)	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Firtec 290, MF	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fish Oil	Liquid	1	-	1	X	X	1	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-
Fixing Solution (Photo)	Liquid	1	1	-	-	-	-	2	2	2	2	-	2	-	1	1	-	1	1	-	-	1
Flint	Gray, Brownish, Black	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Floor Wax (Temperature Dependent)	Varies	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoboric Acid (48% Purity)	Colorless Liquid	1	1	1	1	2	-	2	2	2	-	-	2	1	-	X	-	1	1	-	-	1
Fluoboric Acid (up to 48%)	Colorless Liquid	1	1	-	-	1	-	2	2	2	-	1	2	1	-	X	-	1	1	-	-	1
Fluorine	Pale Yellow Gas	X	-	X	-	X	-	-	-	-	-	1	-	-	X	1	-	-	-	-	-	-
Fluorine (Liquid)	Yellow Liquid	NO HOSE AVAILABLE															-	-	-	-	-	-
Fluosilicic Acid (50%)	Colorless Liquid	1	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	1	2	X	X	2	2	1	2	1	1	1	X	2	1	2	1	-
Formalin (37-50% HCHO with 15% MeOH)	Liquid	1	1	-	1	1	2	X	X	2	2	1	2	1	1	1	-	-	-	-	-	-
Formamide	Colorless Oily Liquid	1	1	-	-	-	-	X	X	-	-	-	-	-	X	-	-	-	-	-	-	-
Formic Acid	Colorless Liquid (bp 100°C)	1	1	1	1	2	-	X	X	1	2	X	2	1	X	X	X	2	1	-	2	1
FR Fluid D	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-
FR Hydraulic Fluid	Brown Liquid	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 12 (Dichlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Freon 13	Gas or Liquid	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Freon 134a (HFC 134a)	Gas or Liquid	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Freon 22 (Chlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Freon 23	Clear Liquid	SPECIAL HOSE REQUIRED															-	-	-	-	-	-
Fruit Juices	Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Fuel Oil (ASTM 1-6)	Water White to Brown Liquids	1	2	1	X	X	1	X	X	2	X	1	X	1	1	X	2	2	2	1	1	-
Fumaric Acid	Colorless Crystals	1	1	1	1	2	-	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-
Fumaric Acid Solution (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	-	2	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2
Furfural Alcohol	Colorless to Brown Liquid	1	1	2	2	X	X	X	X	2	X	1	2	1	1	X	2	1	1	1	1	2
Furfuran (Furan)	Colorless to Brown Liquid	1	1	1	-	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	-
Furfuryl Alcohol	Colorless to Reddish Brown Liquid	1	1	-	2	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
Fusel Oil (Amyl Alcohol, Grain Oil)	Colorless Liquid	1	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	-
Fyrguard 150, 200	-	1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
Fyrquel 15R&O, 220R&O, 550R&O	-	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-
Fyrquel 90, 150, 220, 300, 550, 1000	-	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-
G																						
Gallic Acid (3,4,5 Trihydroxybenzoic Acid)	In Alcohol or Glycerol	1	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Gallic Acid Solution	In Alcohol Solution	1	1	-	1	-	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Gasohol (Gasoline blended with Ethanol)[1]	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X
Gasoline (Oxygenated-Blended With MTBE)[1]	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X
Gasoline (Unleaded Up to 50% Aromatics)[1]	Colorless Liquid	1	2	1	X	X	2	X	X	2	X	1	X	1	1	X	2	1	1	1	1	-
Gasoline (White)[1]	Colorless Liquid	1	2	-	X	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	-
Gelatin	Flakes or Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-
Glacial Acetic Acid	Clear Colorless Liquid	1	1	1	X	2	-	-	-	X	X	X	-	X	X	X	-	-	-	-	-	-
Glacial Methacrylic Acid (GMAA)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glauber's Salt (Sodium Sulfate Decahydrate)	Crystals or Powder	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Gluconic Acid (Commercial 50% Aqueous)	Aqueous Solution	1	-	-	-	-	X	-	X	-	X	-	2	1	-	-	-	-	-	-	-	-
Glucose	Crystals to White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Glucose Solution	Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	1	-
Glue	Varies	1	1	-	-	X	2	X	X	2	X	1	1	-	2	1	2	1	1	1	X	-
Glycerine (Glycerol)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	-
Glycerol (Glycerine)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	-
Glycerol Monolaurate	Liquid above 80°F (27°C)	1	1	1	1	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Glycol FR Fluids	Liquid	1	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Glycol Slurry	Watery Suspension	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycols (ie Ethylene Glycol)	Clear Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	-
GMAA (Glacial Methacrylic Acid)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite	Powdered, Flake, Crystals	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Grease	Semi-Solid	1	1	2	2	X	1	X	X	2	X	1	2	-	-	1	1	1	1	1	1	-
Grease, Silicone Base	-	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	-
Green Liquor (Effluent Alkaline Pulping)	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Green Sulfate Liquor	Liquid	1	1	1	-	1	2	1	1	1	1	-	1	2	-	-	1	1	1	-	-	-
H																						
Halowax (Chlorinated Hydrocarbons)	Oils to Waxy Solid	1	1	1	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
HEA (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	
HEA Acid (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hematite (Iron Ore)	Black to Brick Red	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
HEP (2-Hydroxypropyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Heptachlor (In Xylene)	Liquid	1	2	-	X	X	2	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Heptanal (Heptaldehyde)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptane	Colorless Liquid	1	2	1	X	X	1	X	X	2	X	1	X	1	1	2	1	1	1	1	1	-
Heptanedicarboxylic Acid (Azelaic Acid)	Yellowish to White Powder	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptanoic Acid	Clear Oily Liquid	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Heptanol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	X	1	1	-	-	-	-	-	-
Hexachlorocyclohexane	White to Yellowish Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	Yellow Liquid	1	-	-	X	X	-	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid (Palmitic Acid)	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydrophthalic Anhydride	Clear Colorless Viscous Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexaldehyde	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Hexamethylenediamine, Solution	Colorless Flat Solid Leaflets	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexamethyleneimine	Clear Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexane	Colorless Liquid	1	X	1	X	X	1	X	X	-	X	1	-	1	1	X	1	1	1	-	1	-
Hexanol (Hexyl Alcohol)	Colorless Liquid	1	1	-	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	2	-
Hexanone (Ethyl Propyl Ketone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Hexene	Colorless Liquid	1	-	-	X	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexyl "Cellosolve" (EG monohexyl ether)	Water White Liquid	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

[1] Only use fuel rated hose, except for transfer.

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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	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Honey	Yellow Liquid	1	-	-	-	1	1	-	1	1	-	1	-	-	-	1	-	-	-	-	-	-
Houghto-Safe 1055, 1110, 1115, 1120, 1130	Liquid	1	1	-	-	1	X	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
Houghto-Safe 271, 416, 520 & 616, 620	Liquid	1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
Houghto-Safe 5046	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Houghto-Safe 625, 640 & 525 (Under 100°F/38°C)	Liquid	1	1	-	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
HPA Acid (2-Hydroxypropyl Acrylate)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
HPO (Sodium Thiosulfate)	White Powder	1	1	-	-	-	1	1	1	1	1	-	1	1	1	1	X	1	1	2	X	-
Hy-Chock Oil	Liquid	1	1	-	-	-	1	-	-	-	-	1	-	-	1	-	1	1	1	-	-	-
Hydrocyanic Acid (up to 98%)	Water White Liquid	1	X	-	-	-	-	-	-	-	-	1	-	-	-	-	X	1	1	1	X	-
Hydrafluid 760 (Texaco and Houghton)	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	1	-
Hydrafluid AZR&O, A, B, AA, C	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	-
Hydrasol A (Textile Dying)	-	1	1	-	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	-
Hydraulic Fluid (Phosphate Ester Base)	Liquid	1	1	-	-	1	X	-	-	X	1	1	-	-	1	1	1	1	1	-	-	-
Hydraulic Fluid (Polyalphaolifin)	Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-
Hydraulic Fluid (Std. Petroleum Oils)	Liquid	1	1	-	-	X	1	X	X	2	X	1	2	1	1	1	1	1	1	1	1	-
Hydraulic Fluid (Water Glycol Base)	Liquid	1	1	-	-	-	1	2	2	1	1	1	-	-	1	1	1	1	1	1	1	-
Hydraulic Fluid HF-18, HF-20	Liquid	1	1	-	-	1	1	-	-	-	1	1	-	-	1	2	1	1	1	1	1	-
Hydraulic Fluid HF-31	Liquid	1	1	-	-	X	-	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Hydrazine	Colorless Fuming Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydrazine Hydrate	Colorless Fuming Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydrazine Solution	Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydro-Drive Oil (Houghton)	Liquid	1	-	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	-
Hydrobromic Acid (62% and less)	Colorless to Yellow Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	-
Hydrobromic Acid (to 48%)	Colorless to Yellow Liquid	1	1	1	1	1	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	-
Hydrochloric Acid (15%)	Colorless to Yellow Liquid	1	1	1	1	2	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Hydrochloric Acid (37%)	Colorless to Yellow Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Hydrochloric Acid, anhydrous	Colorless Fuming Gas	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	X	X	X	X	X	-
Hydrocyanic Acid (10% Solution with water)	Water White Liquid	1	1	1	-	-	X	2	2	X	-	1	2	X	-	X	X	1	1	1	X	-
Hydrocyanic Acid (98% or less)	Water White Liquid below 77°F (25°C)	1	-	-	-	-	-	-	-	-	-	1	-	X	-	X	-	-	-	-	-	-
Hydrocyanic Acid (up to 20%)	Water White Liquid	1	1	-	-	1	2	2	2	2	-	1	1	X	-	2	-	-	-	-	-	-
Hydrofluoric Acid (38% or less)	Colorless Liquid	1	1	1	1	2	X	X	X	2	2	1	1	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (47% or less)	Colorless Liquid	1	1	1	1	2	X	X	X	2	2	1	2	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (53 % or less)	Colorless Liquid	1	1	X	1	-	X	X	X	2	X	1	2	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (70%)	Colorless Liquid	1	1	X	1	X	X	X	X	X	-	1	2	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (Concentrated)	Colorless Liquid	1	1	X	2	X	X	X	X	X	X	2	2	1	X	X	X	X	X	X	X	-
Hydrofluosilicic Acid	In Water	1	1	1	2	2	X	X	X	X	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	-	X	-	-	-	-	-	-	-	-
Hydrogen Bromide Solution (HydroBromic Acid)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrogen Bromide, Anhydride	Colorless Gas	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrogen Chloride	Colorless Fuming Gas	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydrogen Dioxide (Hydrogen Peroxide)	Liquid	1	-	-	-	2	X	-	-	2	-	1	1	-	-	-	-	-	-	-	-	-

CHEMICAL RESISTANCE

DRIVEN BY POSSIBILITY™

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		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Hydrogen Fluoride	Colorless Gas or Liquid	1	-	-	-	1	X	X	X	-	2	X	-	-	-	-	1	1	1	-	-	-
Hydrogen Peroxide (35% or less)	Liquid	1	1	1	X	1	2	X	X	1	X	1	1	X	1	1	X	2	1	1	X	-
Hydrogen Peroxide (50% or less)	Liquid	1	2	1	X	1	2	X	X	1	X	1	1	X	2	2	X	2	1	1	X	-
Hydrogen Peroxide (70% or less)	Liquid	1	2	1	X	2	X	X	X	2	-	1	1	X	X	2	X	2	1	1	X	-
Hydrogen Peroxide (90% or less)	Liquid	1	-	1	-	2	X	X	X	2	-	1	1	X	X	X	X	2	1	1	X	-
Hydrogen Sulfide	Colorless Gas	NO HOSE AVAILABLE															-	-	-	-	-	-
Hydrogen Sulfide, 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	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate (HEA)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate Acid (HEA Acid)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate	Clear Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate Solution in Xylene	Clear Liquid	1	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hydroxypropyl Acrylate Acid (HPA Acid)	Liquid	1	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hylene (Toluene Diisocyanate)	Yellow Liquid	1	-	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Hypochlorous Acid (only in dilute solutions)	Greenish-Yellow Aqueous Sol.	1	1	1	1	2	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
I																						
Ink (Printers)	Liquid	1	1	-	-	X	2	X	X	-	X	X	-	-	1	-	2	2	1	-	2	-
Ink Oil	Liquid	1	2	-	-	-	2	-	-	-	-	-	-	-	-	-	1	1	1	-	1	-
Insulating Oil (Transformer)[1]	Liquid	1	1	-	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	-
Iodine	Grayish Black Granules	1	-	-	-	-	-	-	1	X	-	-	-	-	-	X	X	X	X	-	-	-
Iodine Solution	Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Iodine, In Alcohol	Liquid	1	1	1	1	1	-	X	X	2	-	1	-	1	-	1	-	-	-	-	-	-
Iron Acetate Liquor (Black Liquor)	Black Liquid	1	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Iron Hydroxide	Brown Precipitate	1	-	-	-	1	1	-	X	1	1	1	1	-	-	-	-	-	-	-	-	-
Iron Ore (Hematite)	Black to Brick Red	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide (Black, Brown, Red or Yellow)	Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide Slurry	Slurry	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Salts	-	1	-	-	-	1	1	-	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Iron Sulfate Solution (Ferric Sulfate)	Liquid	1	1	1	-	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1
Iron Sulfide Solution (Ferrous Sulfide)	Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isoamyl Acetate	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	X	-	-	-	-	-	-	-	-
Isoamyl Alcohol (Isobutyl Carbinol)	Colorless Liquid	1	-	-	-	2	2	-	2	2	2	2	2	1	-	-	-	-	-	-	-	-
Isoamyl Bromide	-	1	-	-	-	X	X	-	X	X	X	2	X	X	-	-	-	-	-	-	-	-
Isoamyl Butyrate	Water White Liquid	1	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Chloride	Colorless to Yellow Liquid	1	2	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Isoamyl Ether	Colorless Liquid	1	-	-	-	-	X	-	X	-	X	X	X	X	-	-	-	-	-	-	-	-
Isoamyl Phthalate	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	X	-	-	-	-	-	-	-	-
Isobutane	Colorless Gas	USE LPG HOSE ONLY															-	-	-	-	-	-
Isobutane Liquid	Liquid @ 98 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isobutanol (Isobutyl Alcohol)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-
Isobutene (Isobutylene)	Gas	1	-	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-
Isobutyl Acetate	Colorless Liquid	1	-	-	-	X	X	-	X	X	X	X	X	2	-	-	-	-	-	-	-	-
Isobutyl Alcohol (Isobutanol)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-

[1] Petroleum hose only.

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		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Isobutyl Aldehyde (Isobutyraldehyde)	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	2	-	-	-	-	-	-	-	-
Isobutyl Carbinol (Primary Isoamyl Alcohol)	Colorless Liquid	1	-	-	-	2	2	-	2	2	2	2	2	-	-	-	-	-	-	-	-	-
Isobutylamine	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Isobutylene (Isobutene)	Gas	1	-	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-
Isobutylene Liquid (Isobutene Liquid)	Liquid @ 88 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isobutyraldehyde (Isobutyl Aldehyde)	Colorless Liquid	1	-	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isocyanate (Toluene Diisocyanate)	Water White to Yellow Liquid	1	2	1	X	X	X	X	X	X	X	1	-	-	1	-	1	1	1	-	-	-
Isooctane	Colorless Liquid	1	2	-	X	X	1	X	X	1	X	1	1	2	1	X	1	1	1	2	1	-
Isooctyl Adipate	Viscous Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isooctyl Alcohol	Clear Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isooctyl Thioglycolate	Water White Liquid	1	1	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isopentane	Colorless Liquid	1	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isophorone	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophthaloyl Chloride	Liquid above 106°F (41°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isopropanol (Isopropyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropanolamine (MIPA)	Liquid	1	2	-	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	-	-
Isopropyl Acetate	Colorless Liquid	1	1	1	1	2	X	X	X	X	2	-	X	-	1	X	1	1	1	1	1	-
Isopropyl Alcohol (Isopropanol)	Colorless Liquid	1	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropyl Benzene (Cumene)	Colorless Liquid	1	2	-	X	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Isopropyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Isopropyl Ether	Colorless Liquid	1	1	1	-	X	X	X	X	X	2	X	X	X	1	X	1	1	1	1	1	-
Isopropylamine	Colorless Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	Colorless Liquid	1	2	-	X	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Isopropyltoluene (Cymene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	1	-	1	1	1	1	1	-
J																						
Jet Fuel A and A1[2]	Liquid	1	-	-	-	-	1	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Jet Fuel JP1[2]	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	X	1	X	-	-	-	-	-	-
Jet Fuel JP10 (Tetrahydroxydicyclopentadiene)[2]	Liquid	1	-	-	X	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Jet Fuel JP4[2]	Liquid	1	1	-	X	X	1	X	X	2	X	1	X	X	1	X	2	1	1	2	1	-
Jet Fuel JP5[2]	Liquid	1	1	-	X	X	1	X	X	X	X	1	X	X	1	X	2	1	1	2	1	-
Jet Fuel JP8[2]	Liquid	1	1	-	X	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	1	-	-	-
Kerosene	Water White Oily Liquid	1	1	-	X	X	1	X	X	X	X	1	X	1	1	2	1	1	1	1	1	-
Ketchup	Red Liquid	-	-	-	1	-	1	-	-	1	-	-	-	-	1	-	-	1	1	-	-	-
Ketoglutaric Acid	In Water or Alcohol	1	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ketones (ie Acetone, MEK, Cyclohexanone)	Generally Liquids	1	1	1	1	2	X	X	X	X	2	X	X	-	1	X	1	1	1	1	1	-
Koch Acid	White Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
L																						
Lacquer - Alcohol or Acetate as Solvent	Solution	1	1	1	1	2	-	-	-	-	-	X	-	-	-	-	X	X	1	1	1	-
Lacquer - Toluene or Xylene as Solvent	Solution	1	-	-	-	-	X	X	X	X	X	1	X	-	1	X	X	X	1	1	1	-
Lactic Acid (90% or less)	Colorless-Yellow Liquid	1	1	1	1	2	X	2	2	1	-	1	1	-	-	X	X	2	1	X	2	-
Lactic Acid, Food-Grade - 50-80%	Colorless to Yellow Liquid	1	1	1	1	2	-	X	X	-	X	1	1	-	-	-	X	2	1	X	2	-
Lactic Acid, Plastic Grade - 50-80% or less	Colorless to Yellow Liquid	1	1	1	1	2	1	-	-	1	-	1	1	-	X	1	X	2	1	X	2	-
Lactic Acid, USP 85-90% or less	Colorless to Yellow Syrupy Liquid	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	X	2	1	X	2	-
Lactol	-	1	1	-	-	-	2	-	-	2	-	-	-	-	-	-	1	1	1	-	1	-
Lard (Fat of the Hog)	Liquid above 108°F (42°C)	1	1	1	X	X	1	X	X	2	X	1	X	1	1	-	1	1	1	1	X	-

[2] Aircraft fueling hose only for fueling operations.

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Lard Oil	Colorless to Yellow Liquid	1	1	-	-	-	-	-	-	2	-	X	-	-	-	-	1	1	1	1	X	-
Lasso (Alachlor)	Colorless Crystals	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-
Latex Paint	Liquid	1	1	1	1	1	1	2	2	-	2	1	-	-	1	1	1	1	1	1	1	-
Lauryl Peroxide	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauryl Alcohol	Liquid above 75°F (24°C)	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Lead Acetate	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	1	1	-	1	-
Lead Acetate Solution	Solution	1	1	1	1	1	2	2	2	-	2	1	-	1	-	1	2	1	1	-	1	-
Lead Arsenate	White Crystals	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead Arsenate Solution (In Nitric Acid)	Solution	1	1	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-
Lead Nitrate Solution (In Water or Alcohol)	Solution	1	1	1	1	1	1	2	2	2	2	1	-	1	-	1	1	1	1	-	-	-
Lead Silicate (basic)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead Sulphate (Basic, Blue Basic, Tribasic)	White to Blue Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead, Tetraethyl (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Lead, Tetramethyl (Tetramethyl Lead)	Colorless Liquid	1	-	-	-	X	2	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Lecithin	Light Brown Viscous Liquid-Solid	1	1	-	-	-	X	-	-	2	-	-	-	-	-	-	-	1	1	-	-	-
Ligroin	Clear Liquid	1	2	-	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	-	-	-
Lime (Calcium Oxide)	White to Gray Lumpy Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime Sulfur Solution	Solution	1	1	1	1	2	X	X	X	1	X	1	2	-	-	2	2	1	1	X	X	-
Lime, Chlorinated (Bleaching Solution)	Solution	1	1	1	1	2	2	2	2	X	2	1	X	-	-	2	X	2	1	-	-	-
Lime, Chlorinated (normal 35-37% Chlorine)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime, Hydraulic (Calcined Limestone)	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lime, Slaked (Calcium Hydroxide)	White Crystalline Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limestone	Powder or Lumps	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limonene	Colorless Liquid	1	2	1	X	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Lindane (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-
Linoleic Acid	Colorless to Straw Colored Liquid	1	1	1	-	X	2	-	-	X	X	1	-	-	-	1	-	-	-	-	-	-
Linseed/Flax Seed	Yellow Amber to Brown Liquid	1	1	X	2	2	2	X	X	2	-	1	1	1	1	1	2	1	1	1	2	-
Liquid Soap	Liquid	1	1	1	-	2	-	2	2	-	2	-	-	-	-	2	1	1	1	1	1	-
Lithium Chloride	White Crystals	-	-	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium Chloride (35-40% Brine)	Solution	X	1	X	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Lubricating Oil Diester (Under 135°F/57°C)	Liquid	1	1	-	-	X	2	X	X	-	X	1	-	-	-	X	1	1	1	1	1	-
Lubricating Oil (SAE 10, 20, 30, 40, & 50)	Liquid	1	-	-	-	-	2	-	-	2	-	-	-	-	1	-	1	1	1	1	1	-
Lubricating Oil (Under 120°F/49°C)	Liquid	1	1	-	-	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-
M																						
Machine Oil (Under 135°F/57°C)	Liquid	1	1	-	-	X	1	X	X	1	X	1	2	-	1	2	1	1	1	1	1	-
Magnesite	White to Brown Crystalline Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate	Colorless Crystalline Aggregate	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate Solution	In Water or Alcohol	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	-	-	-	-	-	-
Magnesium Carbonate	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Magnesium Carbonate Solution (in Acid)	Liquid Solution	1	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	1	1	-	-	-
Magnesium Chloride	Colorless to White Crystals	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	2	-
Magnesium Chloride Brine	Solution	1	1	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Chloride, Hydrated (in H2O or Alcohol)	Solution	1	1	1	1	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Hydroxide	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	-	-
Magnesium Hydroxide Solution (in Dilute Acid)	Liquid Solution	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	X	-	-
Magnesium Nitrate	White Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	1	-
Magnesium Nitrate Solution (in H2O or Alcohol)	Liquid Solution	1	1	1	1	1	1	-	-	-	-	1	-	-	-	-	1	1	1	X	1	-

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Magnesium Oxide, Dry	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Oxide, Slurry	-	1	1	-	-	1	2	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Sulfate Solution	Liquid Solution	1	1	1	1	1	1	1	1	2	1	1	1	1	-	1	2	1	1	-	1	-
Malathion (Ag Spray Dilute)	Clear to Amber Liquid	1	1	1	-	2	-	X	X	-	1	1	-	-	1	1	1	1	1	-	1	-
Malathion (Ag Spray)	Clear to Amber Liquid	1	1	-	-	2	-	-	-	-	1	-	-	-	1	-	1	1	1	-	1	-
Maleic Acid	Liquid	NO HOSE AVAILABLE															-	-	-	-	-	-
Maleic Acid Solution	Solution	1	1	1	1	1	2	2	2	X	-	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	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Malt Extract (Maltine)	Light Brown Viscous Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Malt, Dry	Yellow to Amber Grain	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Maltine (Malt Extract)	Light Brown Viscous Liquid	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Manganese Salts	-	11	-	-	-	1	X	X	-	-	1	1	-	-	1	-	-	-	-	-	-	
Manganese Sulfate (Manganous Sulfate)	Pale Red Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese Sulfate Solution	Solution in Water	1	1	-	-	-	1	2	2	-	-	1	1	1	-	1	-	-	-	-	-	-
Manganese Sulfide (Manganous Sulfide)	Green Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese Sulfite (Manganous Sulfite)	Black to Brownish Red Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
MAPP Gas (Methylacetylene Propadiene)	Liquid	USE LPG HOSE ONLY															-	-	-	-	-	-
Maxmul (Penzoil Hydraulic Fluid)	Liquid	1	-	-	-	-	1	-	-	2	-	-	-	-	-	-	1	-	1	-	-	-
Mayonnaise	Semi-Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
MBK (Methyl Butyl Ketone)	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
MEK (Methyl Ethyl Ketone)	Colorless Liquid	1	2	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-
Mercuric Chloride	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	1	X	X	-
Mercuric Chloride Solution (in H2O or Alcohol)	Solution	1	1	-	-	2	2	2	1	1	2	-	1	1	-	2	X	1	1	X	X	-
Mercuric Cyanide	Colorless Transparent Prisms	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	X	-	-
Mercuric Cyanide Solution (in H2O or Alcohol)	Solution	1	1	-	-	2	2	2	2	1	2	-	1	-	-	-	-	-	-	X	-	-
Mercurous Nitrate Solution	Solution	1	1	1	-	2	-	-	-	-	-	1	-	-	-	-	1	1	1	X	-	-
Mercury	Silver Liquid	1	1	1	-	-	2	2	2	1	2	-	1	1	-	1	1	1	1	X	X	-
Mercury Vapor	Gas	NO HOSE AVAILABLE															-	-	-	-	-	-
Mesityl Oxide (Methyl Isobutenyl Ketone)	Colorless Oily Liquid	1	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Mesitylene (Trimethylbenzene)	Liquid	1	-	-	X	X	X	X	X	X	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	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	2	X	X	X	X	X	X	X	-	-	-	1	1	1	1	1	-
Methyl Acrylate Acid (Methylacrylic Acid)	White Solid	1	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-	-
Methyl Alcohol (100%) (Methanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	2	-
Methyl Bromide	Liquid @ 55 PSIG @ 120°F (49°C)	1	1	-	-	X	X	X	X	X	X	1	X	-	1	X	1	1	1	-	1	-
Methyl Bromoacetate	Colorless to Straw Colored Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Methyl Butanathiol (Butyl Mercaptan)	Liquid	1	1	-	X	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-	-
Methyl Butanol (2-Methyl-1-Butanol)	Colorless Liquid	1	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-
Methyl Butyl Ketone (MBK)	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Methyl Carbitol (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Cellosolve (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Chloride	Liquid @ 160PSIG @ 120°F (49°C)	1	2	-	X	X	X	X	X	X	X	1	X	X	-	X	1	1	1	-	1	-
Methyl Chloroform (1,1,1 Trichloroethane)	Colorless Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Methyl Chloroformate	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Methyl Cyanide (Acetonitrile)	Colorless Liquid	1	1	2	1	2	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Methyl Cyclohexane	Colorless Liquid	1	-	-	X	X	1	X	X	-	X	1	X	2	1	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	Colorless Liquid	1	2	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-
Methyl Formate	Colorless Liquid	1	1	-	-	2	X	X	X	2	2	X	X	-	-	-	1	1	1	1	1	-
Methyl Hexanol	-	1	-	-	-	-	1	-	1	-	1	2	1	-	-	-	-	-	-	-	-	-
Methyl Hexanone (Methyl Isoamyl Ketone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Hexyl Ketone	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Isoamyl Ketone (Methyl Hexanone)	Colorless Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Isobutenyl Ketone (Mesityl Oxide)	Colorless Oily Liquid	1	1	1	-	2	X	X	X	X	2	X	X	X	-	X	1	1	1	1	1	-
Methyl Isobutyl Ketone (MIBK)	Colorless Liquid	1	2	-	-	-	X	X	X	X	2	X	X	X	1	X	-	-	-	-	-	-
Methyl Isopropyl Ketone	Colorless Liquid	1	2	-	-	2	X	X	X	X	2	X	X	X	1	X	1	1	1	1	1	-
Methyl Methacrylate	Colorless Liquid	1	2	-	2	2	X	X	X	X	X	X	2	2	-	1	1	1	1	-	-	-
Methyl Methacrylate Monomer, Inhibited	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-
Methyl Phenol (Cresol)	Liquid above 95°F (35°C)	1	2	-	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-	2
Methyl Propyl Carbinol (2 Pentanol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Methyl Propyl Ether	Colorless Liquid	1	-	-	-	-	X	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Methyl Propyl Ketone (Pentanone)	Water White Liquid	1	-	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Methyl Salicylate	Yellow to Red Liquid	1	1	-	-	2	2	-	-	2	2	-	-	-	-	1	1	1	1	1	1	-
Methyl Stearate	Liquid above 99°F (38°C)	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Sulfate (Dimethyl Sulfate)	Colorless Liquid	1	1	-	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-	-
Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-n-Amyl Carbinol	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Methyl-n-Amylketone	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylacetylene Propadiene (MAPP Gas)	Liquid @ 107 PSIG @ 68°F (20°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylacrylic Acid (Crotonic Acid)	White Crystalline Solid	1	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-	-
Methylal	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Methylallyl Alcohol (Methallyl Alcohol)	Colorless Liquid	1	-	-	-	-	1	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-
Methylallyl Chloride	Colorless to Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylamine (30-40% in H2O)	Colorless Liquid	1	1	-	-	2	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Methylamine (Anhydrous)	Liquid @ 120 PSIG @ (120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Methylamyl Acetate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylamyl Alcohol	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylaniline	Colorless to Brown Liquid	1	1	1	1	2	X	-	-	X	-	1	2	-	X	X	-	-	-	-	-	-
Methyldiethanolamine	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Bromide	Clear Liquid	1	-	-	-	-	2	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	Colorless Liquid	1	1	2	X	X	X	X	X	X	X	2	X	X	X	X	1	1	1	1	1	-
Methylene Dichloride	Colorless Liquid	1	1	-	X	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	X	1	X	X	X	X	1	1	1	X	1	-
Methylene Diphenyl Diisocyanate, MDI	Liquid above 99°F (37°C)	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylstyrene	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

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		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
MIBK (Methyl Isobutyl Ketone)	Colorless Liquid	1	2	-	-	-	X	X	X	X	2	X	X	2	1	X	-	-	-	-	-	-
Milk	White Liquid	USE FDA HOSE ONLY															-	-	-	-	-	-
Mineral Oil	Colorless Liquid	1	1	1	X	X	1	X	X	1	X	1	1	1	1	1	1	1	1	2	1	-
Mineral Spirits (VM&P Naphtha)	Colorless Liquid	1	1	-	X	X	1	X	X	-	X	1	X	-	1	-	1	1	1	2	1	-
MIPA (Isopropanolamine)	Liquid	1	-	-	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	-	-
Mobile Therm 603	Liquid	1	1	-	-	-	1	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-
Molasses	Brown Liquid	1	1	-	1	1	2	2	2	2	1	1	1	-	-	2	2	1	1	2	X	-
Monochloroacetic Acid	Colorless to Light Brown Crystals	1	1	X	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monochloroacetic Acid Solution (in H2O or Alcohol)	Liquid Solution	1	1	X	1	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1
Monochlorobenzene	Clear Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	1	1	1	-	1	-
Monoethanolamine	Colorless Liquid	1	2	1	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	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-
Monoethylamine Solution (70% or less)	Liquid Solution	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoglycerides	Liquid to Solid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monomethylamine (Methyamine)	Liquid @ 120 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	X	-	X	1	1	1	-	-	-
Monopentaerythritol (Pentaerythritol)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Monopentaerythritol Solution	Liquid Solution	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Monosodium Phosphate (Monobasic)	White Powder	1	1	-	-	2	-	2	2	X	2	-	-	1	1	1	-	1	1	X	X	-
Morpholine	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mortar, Inorganic	Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Motor Oil	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-
Mould Oil	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-
Mouth Wash	Liquid	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
MTBE (Methyl Tertiary Butyl Ether)	Colorless Liquid	-	2	-	2	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Muriatic Acid (Hydrochloric)	Colorless to Yellow Liquid	1	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Mustard	Liquid	1	-	-	2	-	-	1	1	1	1	-	1	-	-	-	X	1	1	-	-	-
N																						
n-Hexaldehyde	Colorless Liquid	1	1	-	-	2	X	X	X	2	1	-	-	-	-	-	-	-	-	-	-	-
n-Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Octane	Colorless Liquid	1	2	1	X	X	1	X	X	-	X	1	X	1	1	X	-	-	-	-	-	-
Naphtha (Low Aromatic Content)	Liquid	1	1	-	X	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-
Naphthalene	White Crystalline Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Naphthenic Acid	Commercial Grade is Dark Fluid	1	1	-	2	-	2	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Neohexane	Colorless Liquid	1	-	-	-	X	1	-	-	2	-	1	-	-	1	-	-	-	-	-	-	-
Neutral Oil	Liquid	1	1	1	-	X	2	X	X	2	X	1	-	-	1	-	1	1	1	-	1	-
Nickel Acetate	Green Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Nickel Acetate Solution (In Water or Alcohol)	Solution	1	1	1	1	2	-	2	2	-	1	-	-	-	-	-	1	1	1	1	1	-
Nickel Carbonate	Green to Brown Crystals/Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel Chloride	Brown Deliquescent Scales	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	2	X	X	-
Nickel Chloride Solution (In Water or Alcohol)	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	1	X	2	2	X	X	-
Nickel Nitrate	Green Deliquescent Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	X	-	-
Nickel Nitrate Solution (In Water or Alcohol)	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	2	-	-	2	X	-	-
Nickel Plating Solution	Liquid	1	1	-	-	-	2	2	2	-	-	-	2	-	-	X	-	1	1	-	-	-
Nickel Salts	-	1	1	-	-	1	1	1	1	1	1	1	1	-	1	2	-	-	-	-	-	-
Nickel Sulfate	Yellow Green to Blue Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	X	X	-
Nickel Sulfate Solution	Solution	1	1	-	-	2	2	2	2	2	2	1	2	1	-	1	-	2	1	X	X	-
Nicotine Salts (ie Nicotine Hydrochloride)	Colorless Oil	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	X	2	-	-	-
Niter Cake (Sodium Bisulfate)	Colorless Crystals to White Lumps	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	X	1	1	X	X	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Niter Cake Solution	Solution	1	1	1	1	2	-	X	X	-	2	1	1	1	-	-	-	-	-	-	-	-
Nitric Acid (25% or less)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (10%)	Transparent or Yellowish Liquid	1	1	1	1	1	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (25%)	Transparent or Yellowish Liquid	1	1	1	2	2	X	X	X	X	2	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (35% or less, 26 Degrees Baume)	Colorless Liquid	1	1	1	2	2	X	X	X	X	2	1	1	X	X	X	X	2	2	-	X	-
Nitric Acid (52% or less, 36 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	2	X	X	X	X	X	X	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (61% or less, 40 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	2	X	X	X	X	X	X	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (63.5% or less)	Transparent or Yellowish Liquid	1	X	X	X	X	X	X	X	X	X	1	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	X	X	1	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	X	X	1	X	X	X	X	X	2	2	-	X	-
Nitric Acid (Red Fuming)	Red Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Nitrobenzene	Yellow Liquid @ 43°F (6°C)	1	2	-	1	2	X	X	X	X	X	2	X	X	2	X	1	1	1	1	1	-
Nitroethane	Colorless Liquid	1	1	-	-	2	X	2	2	X	2	-	2	2	-	-	-	1	1	-	1	-
Nitrogen (Cryogenic Liquid)	Liquid	NO HOSE AVAILABLE															1	1	1	1	1	-
Nitrogen (Gas)	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Nitrogen Dioxide (Nitrogen Tetroxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitrogen Fertilizer (Ammonia, Urea)	Solutions in Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen Oxide (Nitrous Oxide)	Gas	1	1	-	1	2	X	X	X	X	1	1	1	1	X	X	1	1	1	-	X	-
Nitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitromethane	Colorless Liquid	1	-	-	-	2	X	-	2	X	2	X	X	-	1	X	-	1	1	-	1	-
Nitropropane	Colorless Liquid	1	1	-	-	2	X	X	X	X	2	X	-	-	1	-	-	1	1	-	1	-
Nitrosyl Chloride	Yellow-Red Liquid or Gas	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Nitrous Acid (Up to 10%)	Light Blue Liquid	1	1	1	-	-	-	-	-	1	-	-	1	-	1	1	X	1	1	X	X	-
Nitrous Oxide (Nitrogen Oxide)	Gas	1	1	-	1	2	X	X	X	X	1	1	1	1	X	X	1	1	1	X	-	-
Nitrous Oxide, Compressed Liquid	Liquid @ 800 PSIG @ 68°F (20°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonene (1-nonylene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonyl Alcohol (Octyl Carbinol)	Colorless Liquid	1	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonylene (Nonene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
O																						
Octadecanoic Acid (Stearic Acid)	Colorless Waxy Solid	1	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	-	-	-	-	-	-	-	-	-
Octyl Carbinol (Nonyl Alcohol)	Colorless Liquid	1	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Octyl Phenol (Diisobutyl Phenol)	White Flakes	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Octylamine	Water White Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Oil (SAE Motor Oils)	Liquid	1	1	-	X	X	1	X	X	2	X	1	2	1	1	2	-	-	-	-	-	-
Oil of Turpentine	Liquid	1	2	2	-	X	1	X	X	2	X	1	X	-	1	1	-	-	-	-	-	-
Oils, Animal (High Fatty Acid Content)	Solid to Liquids	1	2	-	2	X	1	X	X	2	2	1	X	1	-	2	1	1	1	1	1	-
Oils, Mineral (Aliphatic or Aromatic)	Liquids	1	2	-	X	X	2	X	X	X	X	1	2	2	1	X	-	-	-	-	-	2
Oils, Vegetable (Soybean, Coconut, Corn)	Liquids	1	1	-	X	X	1	X	X	-	X	1	X	-	1	-	-	-	-	-	-	1
Oleic Acid (fatty acid)	Yellow to Red Oily Liquid	1	2	2	2	2	2	X	X	2	2	2	X	X	-	2	2	2	1	1	2	1
Oleum (Fuming Sulfuric, 30% SO3 or less)	Clear to Off White Fuming Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	1	-	-	X
Olive Oil	Yellow to Green Liquid	1	1	1	2	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	X	1	X	X	1	X	-	1	1	-	1	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Ortho-xylene (1,2 Dimethylbenzene)	Clear Colorless Liquid	1	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
OS 45 Hydraulic Fluid (Silicate Ester Base)	Liquid	1	-	-	-	X	2	X	X	1	X	1	2	-	-	-	-	-	-	-	-	-
Oxalic Acid	Transparent Crystals	1	-	2	-	-	-	-	1	-	-	-	-	X	-	-	X	2	1	2	X	1
Oxalic Acid (50%)	Crystals in H2O	1	2	1	2	2	X	X	X	X	2	1	2	X	X	X	-	-	-	-	-	-
Oxygen	Colorless Gas	1	1	-	1	1	2	2	2	-	1	1	1	1	-	-	-	-	-	-	-	-
Oxygen, Refrigerated Liquid	Liquid @ 200 PSIG @ -231°F (-146°C)	NO HOSE AVAILABLE															-	-	-	-	-	-
Ozone	Gas	1	2	2	1	1	X	X	X	2	2	2	2	1	2	1	1	1	1	1	1	1
P																						
Paint (Emulsion or Latex)	Liquid	1	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	X	2	X	X	-	X	1	X	-	1	-	-	-	-	-	-	-
Paint Remover	Liquid or Paste	1	2	-	X	X	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-
Paint Resin	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palm Oil	Yellow to Brown Solid	1	1	-	-	-	1	X	X	2	2	-	2	-	-	-	1	1	1	1	1	-
Palmitic Acid (Hexadecanoic Acid)	Crystals in Hot Alcohols	1	1	1	2	2	2	X	X	2	2	1	X	1	-	-	1	2	1	1	X	1
Papermakers Alum (Aluminum Ammonium Sulfate)	In Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paraffin (Aliphatic Hydrocarbon)	Varies from Gas to Waxy Solid	1	1	1	X	X	1	X	X	2	X	1	X	1	-	-	2	1	1	-	1	-
Paraformaldehyde	White Solid - Flakes or Powder	1	-	-	-	-	2	-	1	2	-	-	-	-	-	1	-	1	1	1	-	-
Paraldehyde	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paranox (Detergent, Disperser; Exxon)	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parapol (Liquid Polyisobutylene; Exxon)	Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Peanut Oil	Yellow to Green Liquid	1	1	-	2	-	1	-	-	2	X	-	-	-	-	2	1	1	1	1	1	1
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	X	1	1	-	-	-	X	-	-	-	-	-	-
Pentaerythritol (Monopentaerythritol)	White Powder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentane	Colorless Liquid	1	X	X	X	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Pentanol (Methyl Propyl Carbinol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Pentanone (Methyl Propyl Ketone)	Water White Liquid	1	-	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Pentasol (Amyl alcohols, primary and secondary)	Liquid	1	2	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-
Perchloric Acid (70%)	70% or Less with H2O	1	2	1	2	-	-	2	2	2	2	1	2	-	X	X	-	2	1	-	-	1
Perchloroethylene	Colorless Liquid	1	2	1	X	X	X	X	X	X	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	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	X	1	X	X	X	X	-	-	-	-	-	-
Petroleum Naphtha Flash Point Over 200 Degrees	Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Petroleum Oils (Refined)	Liquid	1	1	1	X	X	1	X	X	2	X	1	2	-	1	1	-	-	-	-	-	-
Petroleum Oils (Sour)	Liquid	1	1	1	X	X	1	X	X	2	X	1	X	-	-	2	-	-	-	-	-	-
Petroleum Paraffin Wax	Solid with Low Melt Points	1	2	2	X	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phenol (Carbolic Acid)	White or Pink Crystals	1	2	-	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-
Phenol Acid	95% or less with H2O	1	2	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	_	X	-
Phenolates	-	1	-	-	-	-	X	-	-	X	-	2	X	-	2	-	-	-	-	-	-	-
Phenolsulfonic Acid	Yellow to Brown Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phenothiazine	Greenish Powder or Flakes	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenyl Acetate	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenyl Chloride (Chlorobenzene)	Clear Volatile Liquid	1	2	-	X	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	X

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Phenylenediamine (ortho)	Colorless to Red Solid Needles	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorone (Diisopropylidene Acetone)	Yellow Liquid	1	1	-	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-
Phosgene (Carbonyl Chloride)	Gas, Liquid 60 PSIG @ 120°F (49°C)	1	X	X	X	X	X	X	X	X	2	1	X	-	2	-	-	-	-	-	-	-
Phosphate Ester Hydraulic Fluid	Liquid	1	1	1	-	1	X	X	X	X	2	-	X	-	2	-	-	-	-	-	-	-
Phosphate Rock	Solid	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate, Trisodium	In Water	1	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (100%)	Crystals	1	2	2	2	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (35% or less)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	-	-	X	1	1	X	2	1
Phosphoric Acid (50%)	Colorless Liquid	1	1	1	1	1	2	2	2	2	2	1	1	1	X	X	X	1	1	X	2	1
Phosphoric Acid (75%)	Colorless Liquid	1	2	1	2	2	-	-	-	-	-	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (85%)	Syrupy Liquid	1	2	1	2	2	X	X	X	X	X	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (90%)	Syrupy Liquid	1	2	1	2	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid, Spent	Liquid	1	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Photographic, Developers	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Emulsions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Fixing Solutions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Phthalic Acid	Colorless Crystals	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Acid (50%)	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Anhydride, Molten	White Crystalline Solid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picric Acid (Solution)	In Water	1	2	2	2	2	-	-	-	-	-	1	-	-	-	-	X	1	1	X	X	1
Picric Acid (Trinitrophenol)	Yellow Crystals	1	2	2	2	2	2	2	2	2	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	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	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	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Polyester Plastic	-	1	1	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-
Polyethylene Glycol	Colorless Liquid to Glassy Solid	1	-	-	-	1	2	-	1	1	1	1	1	-	2	2	-	-	-	-	-	-
Polyethylene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polypropylene Glycol	Liquid	1	1	-	1	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Polypropylene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polystyrene Plastic	Solid Beads	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polyurethane Foam (Under 125°F/52°C)	-	1	1	-	-	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
Polyvinyl Acetate - Emulsions	Emulsion	1	1	1	1	1	1	-	1	2	1	-	1	1	-	1	-	-	-	-	-	-
Potash (Potassium Carbonate) Aqueous Solution	Liquid	1	1	-	1	1	-	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Acetate	White Powder	1	1	-	-	2	2	2	2	2	2	X	2	1	-	1	-	1	1	-	-	1
Potassium Bicarbonate	Colorless Crystal or White Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Bisulfate	Colorless Crystal	1	1	-	-	1	1	1	1	1	1	1	1	1	-	1	-	-	-	-	-	-
Potassium Bromate	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Potassium Bromide	White Crystals or Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Carbonate	White Granular Powder	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	X	1
Potassium Carbonate, Liquid	Colorless to Cloudy Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Chlorate	Colorless to White Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-
Potassium Chloride	Colorless to White Solid	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Chloride, Dry	White Solid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Chromate	Yellow Crystal	1	2	-	-	2	X	X	X	2	2	1	2	1	2	1	-	-	-	-	-	1

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Potassium Cuprocyanide	White Crystalline Solid	1	-	-	-	1	1	1	1	1	1	1	1	-	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	1	2	2	2	2	2	1	2	-	X	2	2	-	-	-	-	-	-
Potassium Hydroxide, Liquid >50%	Colorless to Cloudy Liquid	1	1	-	-	1	2	2	2	2	1	X	2	X	X	2	-	-	-	-	-	-
Potassium Iodide	White Solid	1	-	-	-	1	1	-	-	1	-	1	1	-	-	1	-	-	-	-	-	2
Potassium Nitrate	Colorless to White Solid	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Permanganate	Dark Purple Crystal	1	1	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-
Potassium Persulfate	White Crystal	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Potassium Phosphate	Colorless to White Crystal	1	-	-	-	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-
Potassium Silicate, Other Than Dry	-	1	1	-	-	1	1	2	-	1	-	1	-	-	-	-	-	-	-	-	-	-
Potassium Sulfate	White Crystal or Powder	1	-	-	1	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Sulfide	Red or Yellow Crystal or Solid	1	1	-	-	1	1	-	-	1	1	1	2	-	-	-	-	-	-	-	-	-
Potassium Sulfite	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-
Potassium Thiosulfate	Colorless Crystal	1	-	-	-	1	-	-	-	1	-	1	1	-	-	1	-	-	-	-	-	-
Primatol A, S, P (Ag Spray)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propane Gas	Colorless Gas	CONTACT DENVER PRODUCT APPLICATION															-	-	-	-	-	-
Propanediol	Colorless Liquid	1	1	-	-	1	1	-	-	X	1	1	2	-	-	-	-	-	-	-	-	-
Propanol (Propyl Alcohol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	-
Propionic Acid	Colorless Oily Liquid	1	1	1	1	2	X	2	2	X	2	1	2	-	-	-	1	1	-	-	-	-
Propyl Acetate	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	X	-	2	-	-	-	-	-	-	-	-
Propyl Alcohol (Propanol)	Colorless Liquid	1	1	1	1	1	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	-
Propyl Aldehyde	White Water Liquid	1	-	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Propyl Chloride	Colorless Liquid	1	-	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Propylene	Colorless Gas	1	-	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Propylene Diamine	Colorless Liquid	1	-	-	-	-	2	-	2	-	2	-	X	-	-	-	-	-	-	-	-	-
Propylene Dichloride (Dichloropropane)	Colorless Liquid	1	-	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Propylene Glycol	Liquid	1	1	-	1	1	1	1	1	1	1	1	1	1	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	-	2	X	X	X	X	X	X	1	-	2	1	X	1	1	1	-	-	-
Pydraul 50E	Liquid	1	1	-	-	2	-	-	-	-	2	2	-	2	1	X	-	-	-	-	-	-
Pydraul 540	Liquid	1	1	-	-	X	X	X	X	X	X	1	X	2	X	X	1	1	1	-	-	-
Pydraul 625	Liquid	1	1	-	-	2	X	X	X	X	2	1	X	2	2	X	1	1	1	-	-	-
Pydraul A-200	Liquid	1	1	-	-	X	X	X	X	X	X	1	X	2	2	X	1	1	1	-	-	-
Pydraul F-9	Liquid	1	2	-	-	2	X	X	X	X	2	1	X	2	2	-	1	1	1	-	-	-
Pyrene (Carbon Tetrachloride)	Colorless Liquid	1	2	X	X	X	X	X	X	X	X	1	X	2	1	X	X	2	2	X	2	X
Pyrethrum	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Pyridine (50%)	-	1	2	-	2	-	-	-	-	X	-	X	X	-	-	X	-	1	1	1	1	-
Pyrogard 160, 230, 630	Liquid	1	1	-	-	-	-	-	-	-	-	2	-	-	-	-	1	1	1	-	-	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Pyrogard 51, 53, 55	Liquid	1	1	-	-	2	X	-	-	-	2	-	-	-	-	-	1	1	1	-	-	-
Pyrogard C, D	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
Pyronal (Transformer Oil)	Liquid	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
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 (Canola Oil)	Brownish to yellow Liquid	1	1	-	2	2	2	-	-	2	2	-	X	-	2	-	1	1	1	1	1	-
Red Oil (Commercial Oleic Acid) (MIL-5606)	Liquid	1	2	2	2	2	1	X	X	2	2	2	X	2	1	2	2	2	1	1	2	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Round Up (Glyphosate)	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Rubilene Oils	Liquid	1	1	-	-	X	1	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-
S																						
Salicylic Acid	White Powder	1	1	1	1	2	X	2	2	-	2	2	-	-	1	1	-	1	1	2	-	-
Salt Water (Sea Water)	Liquid	1	1	-	1	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2	-
Sauerkraut	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Sea Water	Colorless Liquid	1	1	-	1	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2	-
Sevin	-	1	2	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Sewage	Sludge	1	1	1	1	1	2	2	X	2	-	-	2	1	1	2	X	1	1	2	1	-
Shampoo	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shellac	Orange to Colorless Flake	1	-	X	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Shortening	-	1	-	-	-	X	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicate of Soda	Brownish or Yellow Liquid	1	1	-	-	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Silicone Greases	Liquid	1	2	-	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1	-
Silicone Oils	Liquid	1	2	-	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1	-
Silver Cyanide	White Powder	1	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Silver Nitrate	Colorless Crystal	1	1	-	-	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	-
Skydrol 500A & 7000	Liquid	1	1	-	1	1	X	X	X	X	2	X	X	2	1	X	1	1	1	1	-	-
Soap Oil	Liquid	1	1	2	-	-	X	-	-	X	-	-	X	-	-	-	1	1	1	-	-	-
Soap Solutions	Liquid	1	1	1	-	1	1	X	X	2	1	1	1	1	1	1	1	1	1	1	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	X	1	1	X	1	1	X	X	-
Sodium Bisulfite	White Crystals or Powder	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	1	1	1	-	-	-
Sodium Borate (Borax)	White Crystals	1	1	-	-	1	1	1	1	1	1	1	1	-	1	1	2	1	1	-	2	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

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
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	1	2	2	1	X	X	-
Sodium Chlorite Solution	Colorless to Cloudy Liquid	2	-	-	-	X	X	2	2	X	2	X	2	-	X	2	-	-	-	-	-	-
Sodium Chromate	Yellow, Translucent Crystals	1	-	-	-	-	1	2	2	1	2	1	X	-	2	2	-	-	-	-	-	-
Sodium Cyanide	In Water	1	1	-	-	1	1	1	1	1	1	1	1	2	1	1	2	1	1	X	X	-
Sodium Cyanide	White Crystaline Powder	1	1	-	-	1	1	1	1	1	1	1	1	2	1	1	2	1	1	X	X	-
Sodium Dichromate	Red to Red-Orange Crystals	1	-	-	-	1	1	2	2	2	1	1	2	-	-	1	-	-	-	-	-	1
Sodium Ferricyanide	Ruby-Red Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sodium Ferrocyanide	Yellow, Transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sodium Fluoride (70%)	White Liquid	1	1	1	-	2	-	2	2	-	2	-	-	-	-	1	-	-	2	-	-	-
Sodium Hydrate	White Solid	1	2	-	-	1	2	2	2	2	2	2	2	-	2	2	-	-	-	-	-	-
Sodium Hydrochlorite	Pale Greenish Liquid	1	2	-	-	2	X	2	X	X	2	1	1	-	2	2	-	-	-	-	-	-
Sodium Hydrosulfide	Colorless Needles	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Hydrosulfite	Lemon Colored Powder or Flake	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Sodium Hydroxide (10%)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Sodium Hydroxide (40%)	Colorless Liquid	1	1	1	1	2	2	1	1	1	2	1	1	1	X	-	2	1	1	X	X	-
Sodium Hydroxide (50%) (Under 212°F/100°C)	Colorless Liquid	1	1	2	1	2	-	-	-	-	-	X	-	1	-	-	-	-	-	-	-	-
Sodium Hydroxide (50%) (Under 115°F/46°C)	Colorless Liquid	1	1	2	1	2	X	1	1	2	1	X	1	1	X	-	2	2	2	X	X	-
Sodium Hydroxide (50%) (Under 180°F/82°C)	Colorless Liquid	1	1	2	1	2	X	X	X	2	2	X	2	1	X	-	X	2	2	X	X	-
Sodium Hydroxide (60%)	White Liquid	1	2	1	-	2	X	2	2	2	2	X	2	1	X	-	X	2	2	X	X	-
Sodium Hydroxide (25%)	Colorless Liquid	1	1	1	1	2	2	1	1	1	2	1	1	1	-	-	X	X	2	X	X	-
Sodium Hypochlorite (20%)	White Liquid	1	2	1	-	1	X	X	X	X	-	X	1	1	2	1	X	X	2	X	X	-
Sodium Hypochlorite (5%)	White Liquid	1	2	1	-	1	X	X	X	-	-	1	1	1	1	1	X	X	2	X	X	-
Sodium Hyposulfate	Large, Transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Metallic	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	X	2	-	X	1	1	1	X	-
Sodium Peroxide	Yellowish White Powder	1	1	2	-	-	-	-	-	1	1	1	1	X	X	1	X	1	1	1	X	-
Sodium Phosphate	Colorless Crystals to White Powder	1	1	-	-	2	-	2	2	X	2	-	-	X	1	1	-	1	1	X	X	-
Sodium Silicate	Lumps of Greenish Glass	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	1
Sodium Sulfate	White Crystals or Powder	1	1	-	-	1	1	2	2	1	1	1	1	1	1	1	-	-	-	-	-	1
Sodium Sulfate Decahydrate (Glauber's Salt)	Crystals or Powder	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Sulfhydrate	Colorless to Cloudy Liquid	1	2	-	-	1	2	X	2	2	2	2	2	-	2	2	-	-	-	-	-	-
Sodium Sulfide	Yellow/Brick Red Flakes or Crystals	1	1	-	-	1	1	2	2	1	1	1	1	2	1	1	-	-	-	-	-	1
Sodium Sulfide Solution	Colorless to Cloudy Liquid	1	2	-	-	1	2	-	2	2	1	2	2	2	X	-	-	-	-	-	-	1
Sodium Sulfite	White Crystals or Powder	1	1	-	-	2	2	2	2	2	2	-	2	-	1	1	1	1	1	-	-	-
Sodium Sulfite Solution	Colorless to Cloudy Liquid	1	2	-	-	1	2	-	2	2	1	2	2	-	X	-	1	1	1	-	-	-
Sodium 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	1	-
Sour Crude Oil	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Soybean Oil	Pale Yellow Oil	1	1	1	2	X	2	X	X	2	2	1	2	2	1	2	1	1	1	-	-	-
Spent Acid	Liquid	1	2	2	X	X	X	X	X	X	X	1	2	X	X	X	-	1	1	-	-	-
Stannic Chloride	Colorless, Fuming Liquid	1	1	-	-	-	2	2	2	X	X	1	X	X	X	2	X	-	-	-	X	-
Stannic Sulfide	Yellow to Brown Powder	1	2	-	-	-	2	-	2	-	2	-	2	-	-	-	-	-	-	-	-	-

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		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Stannous Chloride (Under 150°F)	White Mass	1	1	-	-	2	1	1	1	1	1	1	1	1	X	1	-	-	-	-	-	1
Starch	White Amorphous Powder	1	1	-	1	1	2	1	1	2	-	1	1	-	1	1	-	-	-	-	-	-
Starch Gum (Dextrin)	Yellow or White Powder	1	1	-	-	1	1	-	-	1	X	1	-	-	1	1	-	1	1	-	-	1
Stauffer Jet 1	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Stauffer Jet 2	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Steam	Gas	USE STEAM HOSE ONLY															-	-	-	-	-	-
Stearic Acid(Octadecanoic Acid)	Colorless Waxy Solid	1	1	1	1	2	2	2	2	2	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	-	2	X	2	X	X	-	X	1	-	1	1	2	2	1	1	-	1	-
STPP (Sodium Tripolyphosphate)	White Powder	1	2	-	-	2	-	2	2	-	2	X	-	-	-	-	-	2	1	X	X	-
Straight Synthetic Oils	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Styrene (Monomer)	Colorless Oily Liquid	1	2	-	X	X	X	X	X	-	X	2	-	2	2	-	2	X	2	X	2	-
Sucrose Solutions	Liquid	1	1	-	1	-	1	1	1	1	1	-	1	-	-	-	1	1	1	-	-	-
Sugar, Liquid, Blended	Liquid	1	1	-	1	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-
Sugar, Syrup	Liquid	1	1	-	1	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-
Sulfamic Acid	In Water	1	1	1	1	2	X	X	X	-	2	1	2	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	-	-	-	1	2	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-	-
Sulfur Dioxide (Dry)	-	1	2	-	-	2	X	X	X	X	X	1	2	-	X	1	2	1	1	1	1	-
Sulfur Dioxide (Liquid)	Colorless Liquid	1	-	1	-	1	X	X	X	2	2	X	2	-	-	X	-	-	-	-	-	-
Sulfur Dioxide (Moist)	-	1	-	1	-	1	X	X	X	2	1	2	2	-	-	X	-	-	-	-	-	-
Sulfur Hexaflouride (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	1	2	1	1	1	1	1	1	1	X	-	-	X	X	2	X	X
Sulfuric Acid (100%)	Colorless Liquid	1	X	X	X	X	X	X	X	X	X	2	X	X	-	-	2	X	2	X	X	-
Sulfuric Acid (30%)	Colorless Water Solution	1	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	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	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	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	2	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	2	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (96%)	Colorless Liquid	1	X	1	2	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (98%)	Colorless to Brown Oily Liquid	1	X	1	2	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	X	1	X	X	X	X	-	-	1	-	-	X
Sulfurous Acid (10%)	Colorless Liquid	1	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	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	X	1	-	-	-	X	1	-	-	1	2	1	1	1	-	-	-
Synthetic Oil (Citgo)	Liquid	1	1	-	-	X	-	-	-	-	X	-	-	-	1	2	1	1	1	-	-	-
Syrup Viscous	Liquid	1	1	-	1	-	-	1	1	2	-	1	-	-	-	-	-	1	1	-	-	-
T																						
TEL (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Tellus Oils	Liquid	1	1	-	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	-

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		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
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	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane (Acetylene Tetrachloride)	Colorless Liquid	1	X	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-
Tetrachloroethylene	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Tetrachloromethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachloronaphthalene	Oily Liquid to Crystalline Solid	1	-	-	-	-	-	-	-	-	-	2	-	X	-	-	-	-	-	-	-	-
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	X	1	X	2	-	-	-	-	X
Tetrahydroxydicyclopentadiene (JP 10)[2]	-	-	-	-	X	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Tetralin	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	1	X	-	2	-	-	-	-	-	-	X
Theobromo Oil (Cocoa Butter)	Liquid above 95°F (35°C)	1	1	2	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-
THF (Tetrahydrofuran)	Colorless Liquid	1	X	-	-	2	X	X	X	X	2	1	X	X	1	X	2	-	-	-	-	X
Thiopen	-	1	-	-	-	X	X	X	X	X	2	2	-	-	-	-	-	-	-	-	-	-
Tin Tetrachloride	Colorless Liquid	1	-	-	-	-	2	-	2	X	-	-	2	-	-	-	-	-	-	-	-	-
Titanium Tetrachloride	Colorless Liquid	1	-	-	-	X	X	-	-	X	X	2	-	-	-	-	1	2	2	X	X	-
Toluene (Toluol) (Methyl Benzene)	Colorless Liquid	1	2	2	X	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	-
Toluene Diisocyanate (Hylene)	Yellow Liquid	1	-	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Toluene Diisocyanate (Isocyanate)	Water White to Yellow Liquid	1	2	1	X	X	X	X	X	X	X	1	-	-	1	-	1	1	1	-	-	-
Toluidine	Yellow Liquid or White Crystal	1	-	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Toluol (Toluene)	Colorless Liquid	1	2	2	X	X	X	X	X	X	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	X	1	X	2	1	X	1	1	1	-	1	2
Transformer Oil (Petroleum Type)[1]	Liquid	1	1	-	-	X	1	X	X	2	X	1	X	2	1	2	1	1	1	1	1	-
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	X	-	-	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	X	1	X	X	X	X	-	-	-	-	-	-
Trichloroethylene	Colorless Liquid	1	1	X	X	X	X	X	X	X	X	1	X	2	2	-	X	-	1	X	1	-
Trichloropropane	Colorless Liquid	1	-	-	-	-	2	-	X	2	X	1	X	-	-	-	-	-	-	-	-	-
Tricresyl Phosphate	Colorless Liquid	1	-	X	-	1	X	X	X	X	2	1	X	1	1	-	1	-	2	X	-	-
Triethanolamine (TEA)	Colorless Viscous Liquid	1	1	-	-	1	2	2	2	2	2	X	2	1	-	2	-	1	1	-	1	-
Triethylamine	Colorless Liquid	1	-	-	-	2	2	X	X	-	X	2	-	-	-	-	-	-	-	-	-	-
Triethylene Glycol	Colorless Liquid	1	-	-	-	-	2	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-
Trihydroxybenzoic Acid (Gallic Acid)	In Alcohol or Glycerol	1	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Trimethyl Phosphite	Colorless Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene (Mesitylene)	Liquid	1	-	-	X	X	X	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Trinitrophenol (Picric Acid)	Yellow Crystals	1	2	2	2	2	2	2	2	2	2	1	2	-	X	1	X	1	1	X	X	1
Trioctyl Phosphate	Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenyl Phosphate	Colorless Powder	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tripolyphosphate (STPP), (Sodium)	White Powder	1	2	-	-	2	-	2	2	-	2	X	-	-	-	-	-	2	1	X	X	-
Trisodium Phosphate (TSP)	Colorless Crystal	1	-	-	-	1	2	2	X	2	2	1	X	-	-	-	-	-	-	-	-	-
Tung Oil	Yellow Drying Oil	1	2	-	X	X	2	X	X	X	X	1	2	X	-	2	1	1	1	1	1	-

[1] Petroleum hose only.

CHEMICAL RESISTANCE

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Contact Denver Product Application for recommendations for chemicals not listed.
Phone (303) 744-5070

1 = Preferred - Constant Contact
2 = Acceptable - Intermittent Contact
X = Not Recommended
– = No Data

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

		Gates Hose / Polymers															Couplings / Adapters					
		Chem Master™ XTreme™ FEP	Chem Master™ Plus XLPE	Chem Master™ Plus UHMWPE	Food & Beverage Master																	
		T	K	L	S	P	C	D	D	A	H	V	M	J	Z	G						
Chemical	Form (at room temperature unless otherwise stated)	FEP	Gatron™	UHMWPE	Sanitron™	EPDM	NBR	SBR	NR	Chloroprene	Butyl	Fluorocarbon	Hypalon®	CPE	Nylon	PVC	Iron/Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Brass	Polypropylene
Turpentine	Liquid Oil	1	X	1	X	X	2	X	X	X	X	1	X	X	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	1	1	1	2	1	1	1	2	-	1	1	1	2	1	1	1	-	-	-
V																						
Varnish	-	1	2	-	X	X	X	X	X	X	X	2	X	X	1	-	2	1	1	-	2	-
Vegetable Oils	Liquids	1	-	1	2	2	-	X	X	2	X	-	1	X	1	2	1	1	1	1	-	-
Versilube F-50, F-44	Liquid	1	-	-	-	2	2	2	2	2	2	1	2	-	1	2	1	1	1	1	1	-
Vinegar	Brownish to Colorless Liquid	1	1	-	1	-	2	2	2	2	2	1	X	X	-	1	X	2	1	X	X	-
Vinyl Acetate	Colorless Liquid	1	1	X	2	X	X	X	X	X	2	X	X	X	-	-	-	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	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	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	1	2	1	1	1	1	-
Water (Brine)	Liquid	1	1	-	1	1	2	1	1	2	1	1	1	-	1	1	-	-	-	-	-	1
Water (Deionized)	Liquid	1	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Water (Distilled)	Liquid	1	1	1	1	1	1	1	1	2	1	-	1	-	1	1	-	-	-	-	-	1
Water (Potable)	Liquid	USE FDA HOSE ONLY															-	-	-	-	-	1
Water Glycols	Liquid	1	1	1	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Water in Oil Emulsions	Liquid	1	1	1	2	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
White & Bagley No. 2190 Cutting Oil	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wines	Liquid	1	2	-	1	X	X	X	X	X	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	X	1	X	X	1	X	-	-	-	-	-	-
Xylenol (Dimethylphenol)	White Solid, Liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	-	1	-	X	-	-	-	-	-	-	-	-
Z																						
Zeric	-	1	1	-	-	X	1	-	-	-	X	-	-	-	2	2	-	-	-	-	-	-
Zinc Acetate	White Crystal	1	1	-	-	2	X	2	2	X	2	X	X	X	X	1	1	1	1	1	1	-
Zinc Chloride Solutions	Colorless to Cloudy Liquid	1	1	-	1	-	1	2	2	1	2	1	1	X	1	2	X	2	1	X	X	-
Zinc Chromate	Yellow Solid	1	1	-	-	-	-	-	-	-	-	-	1	X	-	-	-	1	1	-	-	-
Zinc Hydrate	-	1	-	-	-	-	-	-	-	-	-	-	-	X	-	1	-	-	-	-	-	-
Zinc Oxide	White or Gray Powder	1	-	-	-	-	-	-	-	-	-	-	-	X	-	1	-	-	-	-	-	-
Zinc Sulfate Solutions	Colorless to Cloudy Liquid	1	1	-	-	2	2	X	X	2	2	-	2	X	2	2	X	2	1	X	X	-

NOTES

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CORPORATE OFFICE
3rd Floor, Building 10C, DLF Cyber City, DLF Phase II,
Gurgaon - 122002, Haryana-122002

CHENNAI OFFICE
3rd Floor, Smartworks, Bharati Vilas, 26B, Jawaharlal
Nehru Salai, Ekkatuthangal, Guindy Industrial Estate
Chennai - 600032

GATES INDIA FACILITIES

LALRU
Chandigarh Ambala Highway, Lalru, Punjab - 141 104

PUNE
Plot No. K-8, Near Hyundai Company-Khalumbre, Pune
Maharashtra - 410501(india)

FARIDABAD
Plot No.133-134, Sector 59, Phase 2, Faridabad 121 006

CHENNAI
Plot No. F 19, Sipcot Industrial Park, Pondur A, Sriperumbudur,
Kancheepuram Distt. Tamil Nadu 602 105