Gasket Selection Guide

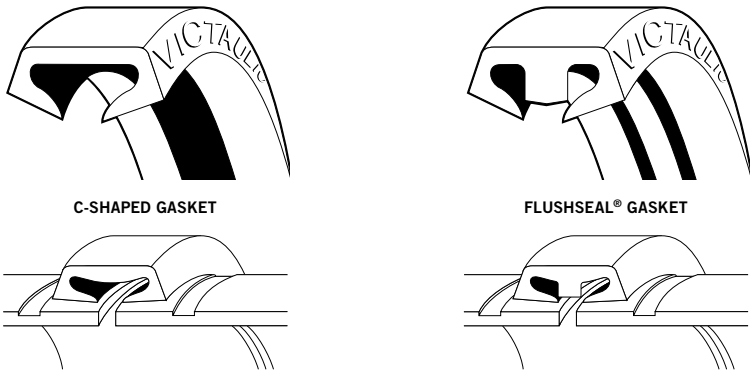
GASKET CONSTRUCTION

The grooved piping concept is simple and reliable. The coupling housing performs several functions as an integral part of the pipe joint. It contains the gasket, which is fully enclosed, reinforcing and securing it in position for proper sealing. The housing also engages on the pipe around the full pipe circumference and creates a unified joint while providing the advantages of mechanical joining.

The sealing efficiency of Victaulic gaskets is such that the gasket forms an initial seal as it is stretched over the pipe ends. As the housing segments are tightened, the resilient elastomeric gasket conforms to the internal cavity of the housing, further enhancing the gasket's seal against the pipe, both in pressure and vacuum conditions. The Victaulic gasket is pressure responsive, providing increased sealing action as the internal pressure is increased. The combination of these characteristics creates a permanent, leak-tight triple seal on a variety of piping materials including steel, stainless steel, aluminum, PVC, ductile iron and copper.

The gasket is molded to fit the internal cavity of the housing. Upon placement of the housing around the gasket and into the grooves, the gasket is positioned.

UNIQUE PRESSURE RESPONSIVE GASKET FORMS A TRIPLE SEAL



SEALS BETWEEN THE PIPE ENDS AND THE GROOVE.

The gasket is then slightly compressed as the housings are tightened to secure the gasket lips in a firm seat on the pipe, between the grooves and the pipe ends.

Line pressure serves to strengthen the seal through the combination of normal gasket resilience, housing reinforcement and the action of pressure downward on the lips.

SEAL IS ENHANCED BY PRESSURE OR VACUUM IN THE LINE

JOB/OWNER

System No. _____

Location _____

CONTRACTOR

Submitted By _____

Date _____

ENGINEER

Spec Sect _____ Para _____

Approved _____

Date _____

Gasket Selection Guide

GASKET/O-RING DATA

Victaulic offers a variety of synthetic rubber gaskets/o-rings to provide the option of grooved piping products for the widest range of applications. To assure the maximum life for the service intended, proper gasket selection and specification in ordering is essential.

Many factors must be considered in determining the optimum gasket/o-ring for a specific service. The foremost consideration is temperature, along with concentration of product, duration of service and continuity of service. Temperatures beyond the recommended limits have a degrading effect on the polymer. Therefore, there is a direct relationship between temperature, continuity of service and gasket life.

Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets/o-rings are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific service recommendations and for a listing of services which are not recommended.

Gasket recommendations apply only to Victaulic gaskets and o-rings. Recommendations for a particular service do not necessarily imply compatibility of the coupling housing, related fittings or other components for the same service.

These recommendations do not apply to rubber-lined or rubber seal valves or other rubber-lined products. Refer to Valve Materials Selection in Section 08.02 or contact Victaulic for recommendations.

Victaulic gaskets are clearly marked as part of the mold with the gasket size, style and compound for easy identification.

Potable Water

Grade “E” EPDM, Grade “E” Vic-Plus™, Grade “EHP” and Grade “EHP” Vic-Plus gaskets were submitted to Underwriters’ Laboratories Inc. for evaluation in potable water applications. EPDM material was tested to the requirements of ANSI/NSF 61 (Drinking Water System Components - Health Effects). Successful completion of this testing allows us to state that our EPDM gasket material is UL classified in accordance with ANSI/NSF 61 for cold (+86°F/+30°C) and hot (+180°F/+82°C) potable water service.

Similarly our Grade “M” halogenated butyl gasket material (which is typically used with our AWWA sized products) has also been UL classified in accordance with ANSI/NSF 61 for cold (+86°F/+30°C) potable water service.

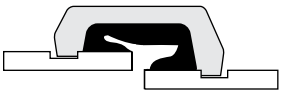
The data provided is intended for use as an aid to qualified designers when products are installed in accordance with the latest available Victaulic product line.

Gasket Selection Guide

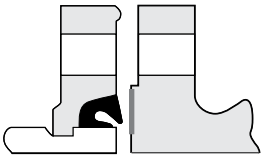
Gasket Styles

ILLUSTRATIONS EXAGGERATED FOR CLARITY

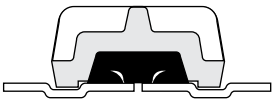
Standard



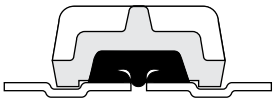
Reducing



Vic-Flange

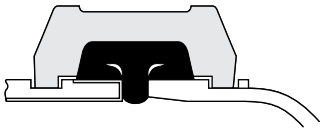


FlushSeal

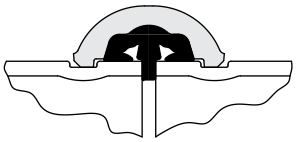


Grooved Copper Tubing with FlushSeal Gasket

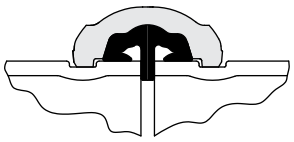
Advanced Groove System (AGS)



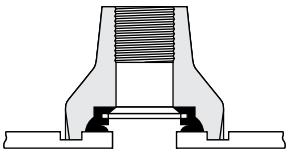
EndSeal



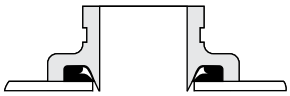
FireLock EZ



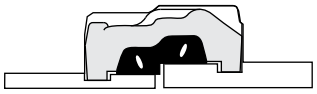
QuickVic



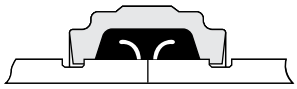
Outlet



Mechanical-T



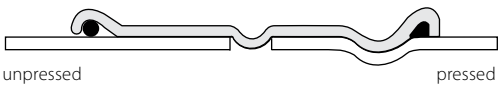
IPS to AWWA Transition



AWWA FlushSeal

Plain End

Plain End Piping System for HDPE Pipe



Pressfit Piping System for Stainless Steel

Gasket Selection Guide

GASKET SELECTION GUIDE

⚠ WARNING

- **To assure maximum life for the service intended, proper gasket selection and specification in ordering is essential. For specific chemical and temperature compatibility, refer to the Gasket Selection and Chemical Services sections. The information shown defines general ranges for all compatible fluids.**

Failure to select the proper rubber compound may result in personal injury or property damage, improper installation, joint leakage or joint failure.

STANDARD GASKETS IPS

Grade	* Temp. Range	Compound	Color Code	General Service Recommendations
E	–30°F to +230°F –34° C to +110° C	EPDM	Green Stripe	Recommended for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. **NOT RECOMMENDED FOR PETROLEUM SERVICES.**
EHP@	–30°F to +250°F –34°C to +120°C	EPDM	Red Stripe	Recommended for hot water service within the specified temperature range. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. **NOT RECOMMENDED FOR PETROLEUM SERVICES**
T	–20°F to +180°F –29° C to +82° C	Nitrile	Orange Stripe	Recommended for petroleum products, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range; not recommended for hot dry air over +140°F/+60°C and water over +150°F/+66°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**
E† (Type A)	Ambient	EPDM	Violet Stripe	Applicable for wet and dry (oil-free air) sprinkler services only. For dry services, Victaulic continues to recommend the use of FlushSeal® gaskets. **NOT RECOMMENDED FOR HOT WATER SERVICES.**

† Vic-Plus gasket.

* For specific chemical and temperature compatibility, refer to the Gasket Selection and Chemical Services sections. The information shown defines general ranges for all compatible fluids.

@ The Grade EHP gasket is only available on QuickVic rigid couplings.

Gasket Selection Guide

SPECIAL GASKETS
IPS

Grade	* Temp. Range	Compound	Color Code	General Service Recommendations
M2	–40°F to +160°F –40° C to +71° C	Epichlorohydrin	White Stripe	Specially compounded to provide superior service for common aromatic fuels at low temperatures. Also suitable for certain ambient temperature water services.
V	–30°F to +180°F –34° C to +82° C	Neoprene	Yellow Stripe	Recommended for hot lubricating oils and certain chemicals. Good oxidation resistance. Will not support combustion.
O	+20°F to +300°F –7° C to +149° C	Fluoro-elastomer	Blue Stripe	Recommended for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons to +300°F/+149°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**
L	–30°F to +350°F –34° C to +177° C	Silicone	Red Gasket	Recommended for dry heat, air without hydrocarbons to +350°F/+177°C and certain chemical services.
A	+20°F to +180°F –7° C to +82° C	White Nitrile	White Gasket	No carbon black content. May be used for food. Meets FDA requirements. Conforms to CFR Title 21 Part 177.2600. Not recommended for hot water services over +150°F/+66°C or for hot, dry air over +140°F/+60°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**
T EndSeal	–20°F to +150°F –29° C to +66° C	Nitrile	No External Identification	Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. Temperature Range –20°F/–29°C to +150°F/+66°C. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. **Not recommended for hot water services over +150°F/+66°C or for hot, dry air over +140°F/+60°C.** For maximum gasket life under pressure extremes, temperature should be limited to +120°F/+49°C.
EG	–30°F to +230°F –34°C to +110°C	EPDM	Double Green Stripes	Recommended for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. DVGW, KTW, ÖVGW, and SVGW approved for W534, EN681-1 Type WA cold potable water service up to +122°F/+50°C. **NOT RECOMMENDED FOR PETROLEUM SERVICES**
EF	-30°F to +104°F -34°C to +40°C	EPDM	Green X	Recommended for potable water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. French ACS (Crecep) approved for EN681-1 Type WA cold potable water service. **NOT RECOMMENDED FOR PETROLEUM SERVICES**

Gasket Selection Guide

AWWA COUPLING GASKETS

Grade	* Temp. Range	Compound	Color Code	General Service Recommendations
S	–20° F to +180°F –29° C to +82° C	Nitrile	Orange Stripe	Specially compounded to conform to ductile pipe surfaces. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range; not recommended for hot dry air over +140°F/+60°C and water over +150°F/+66°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**
M	–20°F to +200°F –29° C to +93° C	Halogenated Butyl	Brown Stripe	Recommended for water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Readily conforms to ductile pipe surfaces. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C potable water service. **NOT RECOMMENDED FOR PETROLEUM SERVICES.**

* For specific chemical and temperature compatibility, refer to the Gasket Selection and Chemical Services sections. The information shown defines general ranges for all compatible fluids.

Gasket Selection Guide

GASKET SELECTION

Chemical compositions are listed in alphabetical order. **Unless otherwise noted, temperatures are ambient.** For chemicals or combinations not listed contact Victaulic for recommendations. DO NOT ASSUME THAT A SERVICE SIMILAR TO THE ONE LISTED CAN BE ACCOMMODATED WITH THE SAME GASKET.

The data and recommendations presented are based upon the best information available resulting from our field experience and laboratory testing by our own Engineering Department. In addition, we have incorporated the recommendations supplied by prime producers of basic copolymer materials and information furnished by leading molders of rubber products.

The information presented in this guide is general in scope and should be used only with this full knowledge and understanding. In unusual, critical or severe services, full information should be referred to Victaulic.

Where possible, materials should be subjected to simulated service conditions to determine their suitability for the service intended. Furthermore, it should not be concluded that, in instances where a liner is not affected by several substances used alone, their combination will have no reaction on the liner. Caution should be exercised with explosive, inflammable or toxic fluids. All gasket recommendations are based on pressure and temperature limitations published by Victaulic. Borderline services always should be verified by Victaulic.

Where two gaskets are shown under Gasket Grade, both are acceptable under normal conditions for the service listed.

Rating Code Key	
G	**Good**
C	**Conditional** (Submit analysis of materials to Victaulic for positive recommendations)
NR	**Not Recommended** (See pg.10 for complete listing)

For services not listed contact Victaulic for recommendations.

Gasket recommendations apply only to Victaulic gaskets. Recommendation for a particular service does not necessarily imply compatibility of the coupling housing, related fittings or other components for the same service. These recommendations do not apply to rubber lined valves.

Gasket Selection Guide

Chemical Services

Chemical Composition	Rating Code	Gasket Grade
ASTM #3 Oil	G	T
Acetaldehyde	G	E
Acetamide	G	T
Acetic Acid up to 10% 100°F/38°C	G	E
Acetic Acid up to 10-50% 100°F/38°C	G	L
Acetic Acid, Glacial 100°F/38°C	G	L
Acetic Anhydride	G	E
Acetone	G	E
Acetonitrile	G	T
Acetophenone	G	E
Acetylene	C	E/T
Acrylic Resin	G	V
Acrylonitrile	NR	—
Adipic Acid	G	T
Alkalis	G	E
Allyl Alcohol to 96%	G	E
Allyl Chloride	NR	—
Alum Sulfuric Acid	C	O
Alums	G	E/T
Aluminum Chloride	G	E/T
Aluminum Fluoride	G	E/T
Aluminum Hydroxide	G	E
Aluminum Nitrate	G	V/E/T
Aluminum Oxychloride	C	T
Aluminum Phosphate	G	E
Aluminum Salts	G	E
Aluminum Sulfate	G	E/T
Ammonia, Anhydrous (Pure Ammonia)	NR	—
Ammonia, Aqueous (40% Max)	G	E
Ammonium Alum	G	V
Ammonium Bifluoride	G	T
Ammonium Carbonate	G	E
Ammonium Chloride	G	T
Ammonium Fluoride	G	E
Ammonium Hydroxide	G	E
Ammonium Metaphosphate	G	E
Ammonium Nitrate	G	T
Ammonium Nitrite	G	E
Ammonium Persulfate, to 10%	G	E
Ammonium Phosphate	G	T
Ammonium Sulfamate	G	T
Ammonium Sulfate	G	E/T
Ammonium Sulfide	G	E
Ammonium Thiocyanate	G	E
Amyl Acetate	G	E
Amyl Acetate	G	E
Amyl Alcohol	G	E
Amyl Borate	G	V
Amyl Chloride	NR	—
Amyl Chloronaphthalene	C	T
Anderol	G	O
Anthraquinone	NR	—
Anthraquinone Sulfonic Acid	NR	—
Aniline	G	E
Aniline Dyes	C	E
Aniline Hydrochloride	C	E
Aniline Oil	G	E
Animal Fats	G	A
Antimony Chloride	G	E
Antimony Trichloride	G	E
Argon Gas	G	E/O
Aroclor(s)	G	O
Arsenic Acid, to 75%	G	T
Arylsulfonic Acid	NR	—
Barium Carbonate	G	E
Barium Chloride	G	E/T
Barium Hydroxide	G	E/T
Barium Nitrate	G	V
Barium Sulfide	G	T
Beer	G	A
Beet Sugar Liquors	G	A
Benzaldehyde	C	E
Benzene	G	O
Benzene Sulfonic (Aromatic Acid)	C	V
Benzine (see Petroleum Ether)	G	O
Benzoic Acid	G	E
Benzol	G	O
Benzyl Alcohol	G	E
Benzyl Benzoate	G	E
Black Sulfate Liquor	G	T
Blast Furnace Gas	C	T
Bleach, 12% Active Cl2	C	E
Borax	G	E
Bordeaux Mixture	G	E
Boric Acid	G	E/T
Bromine	G	O
Bromine Water	G	V
Butadiene	C	V
Butane Gas	C	T
Butanol (see Butyl Alcohol)	G	E/T
Butter	G	A
Butyl Acetate	C	E
Butyl Acetyl Ricinoleate	G	E
Butyl Alcohol	G	E/T
Butyl "Cellosolve Adipate"	G	E/T
Butyl Phenol	C	E
Butyl Stearate	G	T
Butylene	G	T
Butylene Glycol	G	E
Butyne Diol	NR	—
Butyraldehyde	C	V
Cadmium Cyanide	C	V
Calcium Acetate	C	T
Calcium Bisulphate	G	T
Calcium Bisulphide	G	T
Calcium Bisulphite	G	T
Calcium Chloride	G	E/T
Calcium Fluophosphate	C	V
Calcium Hydroxide (Lime)	G	E/T
Calcium Hypochlorite	G	E
Calcium Hypochloride	G	E
Calcium Nitrate	G	V/E/T
Calcium Sulfate	G	E/T
Calcium Sulfide	G	E
Caliche Liquors	G	T
Cane Sugar Liquors	G	A
Carbitol	G	E/T
Carbonic Acid, Phenol	G	O
Carbon Bisulphide	C	O
Carbon Dioxide, Dry	G	E/T
Carbon Dioxide, Wet	G	E/T
Carbon Disulphide	G	O
Carbon Monoxide	G	E
Carbon Tetrachloride	G	O
Castor Oil	G	A
Caustic Potash	G	E
Cellosolve Acetate	G	E
Cellosolve (Alcohol Ether)	G	E
Cellulose Acetate	G	E
Cellulube 220 (Tri-Aryl-Phosphate)	G	E
Cellulube Hydraulic Fluids	G	E
China Wood Oil, Tung Oil	G	T
Chloralhydrate	NR	—
Chloric Acid to 20%	C	E
Chlorine, Dry	C	O
Chlorine, Water 4000 PPM (max.)	C	E
Chlorinated Parafine (Chlorocosane)	G	T
Chloroacetic Acid	G	E
Chloroacetone	G	E
Chlorobenzene	C	O
Chlorobromomethane	NR	—
Chloroform	G	O
Chlorosulphonic Acid	NR	—
Chrome Alum	G	T
Chrome Plating Solutions	G	O
Chromic Acid, to 25%	G	O
Citric Acid	G	E
Cocoanut Oil	G	A
Cod Liver Oil	G	A
Coke Oven Gas	G	T/O
Copper Chloride	G	T
Copper Cyanide	G	T
Copper Fluoride	G	E
Copper Nitrate	G	E/T
Copper Sulfate	G	E/T
Corn Oil	G	A
Cotton Seed Oil	G	A
Creosol, Cresylic Acid	G	O
Creosote, Coal Tar	G	O
Creosote, Wood	G	O
Cupric Fluoride	G	T
Cupric Sulfate	G	T
Cyclohexane (Alicyclic Hydrocarbon)	G	O
Cyclohexanol	G	V
Cyclohexanone	C	E
Deionized Water	G	E
Dextrim	G	T
Diacetone Alcohol	G	V
Dibutyl Phthalate	G	E
Dichloro Difloro Methane	G	T
Dicyclohexylamine	C	T
Diesel Oil	G	T
Diethyl Ether	C	T
Diethyl Sebacate	G	E
Diethylamine	G	T
Diethylene Glycol	G	E/T
Digester Gas	G	T/S
Dimethylamine	G	T
Dioctyl Phthalate	G	E
Dioxane	G	E
Dipentene (Terpene-Hydrocarbon)	C	T
Dipropylene Glycol	G	T
Dowtherm A	G	O
Dowtherm E	G	O
Dowtherm SR-1	G	T/E
Ethanolamine	G	E
Ethyl Acetoacetate	G	E
Ethyl Acrylate	G	L
Ethyl Alcohol	G	E/T
Ethyl Cellulose	C	E
Ethyl "Cellusolve"	G	E
Ethyl Chloride	G	E
Ethyl Ether	C	T
Ethyl Formate	C	V
Ethyl Oxalate	G	E
Ethyl Silicate	G	T
Ethylene Chlorohydrin	G	E
Ethylene Diamine	G	T
Ethylene Dichloride (Dichloroethane)	G	O
Ethylene Glycol	G	E/T
Ethylene Oxide	NR	—
Fatty Acids	G	A
Ferric Chloride, to 35%	G	E/T
Ferric Chloride, Saturated	G	E
Ferric Hydroxide	C	E
Ferric Nitrate	G	V
Ferric Sulfate	G	T
Ferrus Ammonium Sulfate to 30%	G	V
Fish Oils	G	A
Fluboric Acid	G	E
Fluorine Gas, Wet	NR	—
Fluorosilicic Acid	G	V
Fly Ash	G	E
Foam	G	E
Fog Oil	G	T
Formaldehyde	G	E/T
Formanide	G	T
Formic Acid	G	E
Freon 11, 130°F/54°C	G	T
Freon 12, 130°F/54°C	G	T
Freon 21	NR	—
Freon 22, 130°F/54°C	G	V
Freon 113 130°F/54°C	G	T
Freon 114,130°F/54°C	G	T
Freon 123	NR	—
Freon 134a,176°/80°C	G	E/T
Fructose	G	T
Fuel Oil	G	T
Fumaric Acid	G	E
Furan	NR	—
Furfuryl Alcohol	G	E
Gallic Acid	NR	—
Gasoline, Refined	G	T
Gasoline, Refined, Unleaded	C	O
Gelatin	G	A
Glucose	G	A
Glue	G	T/E
Glycerin	G	E/T
Glycerol	G	E/T
Glycol	G	E/T
Glycolic Acid	C	E
Grease	G	T
Green Sulfate Liquor	G	T
Halon 1301	G	E
Heptane	G	T
Hexaldehyde	G	E
Hexane	G	T
Hexanol Tertiary	G	T
Hexyl Alcohol	G	V/T
Hexylene Glycol	G	T
Hydrobromic Acid, to 40%	G	E
Hydrochloric Acid, to 36%, 75°F/24°C	G	E
Hydrochloric Acid, to 36%, 158°F/70°C	C	O
Hydrocyanic Acid	G	E
Hydrofluoric Acid, to 75%, 75°F/24°C	G	O
Hydrofluosilicic Acid	G	T
Hydrogen Gas, Cold	C	E/T
Hydrogen Gas, Hot	C	E
Hydrogen Peroxide, to 50%	C	L
Hydrogen Peroxide, to 90%	C	O
Hydrogen Phosphide	NR	—
Hydrogen Sulfide	G	E
Hydroquinone	G	T
Hydroxylamine Sulfate	C	E
Hypochlorous Acid, Dilute	G	E
Iso Octane, 100°F/38°C	G	T
Isododecane	G	V
Isobutyl Alcohol	G	E
Isopropyl Acetate	G	E
Isopropyl Alcohol	G	E
Isopropyl Ether	G	T
JP-3	G	T
JP-4	G	T

NOTE: The Grade "EHP" gasket can be used on all chemical, water and air services suitable for Grade "E" gaskets.

Gasket Selection Guide

Chemical Composition	Rating Code	Gasket Grade
JP-5, 6, 7, 8	G	T
Kerosene	G	T
Ketones	G	E
Lactic Acid	G	A
Lard	G	A
Lard Oil	G	V
Latex (1% Styrene & Butadiene)	G	O
Lauric Acid	G	T
Lauryl Chloride	NR	—
Lavender Oil	G	T
Lead Acetate	G	T
Lead Chloride	C	E
Lead Sulfamate	G	V
Lead Sulfate	G	T
Lime and H2O	G	E/T
Linoleic Acid	G	O
Linseed Oil	G	A
Lithium Bromide	G	T
Lithium Chloride	G	T
Lubricating Oil, Refined	G	T
Lubricating Oil, Sour	G	T
Lubricating Oil, to 150°F/66°C	G	T
Lubricating Oil, 150°F/66°C to 180°F/82°C	G	V
Magnesium Ammonium Sulfate	C	V
Magnesium Chloride	G	E/T
Magnesium Hydroxide	G	E/T
Magnesium Nitrate	G	V
Magnesium Oxide	C	V
Magnesium Sulfate	G	E/T
Maleic Acid	G	T
Malic Acid	G	T
Mercuric Chloride	G	E/T
Mercuric Cyanide	G	T
Mercurous Nitrate	G	E/T
Mercury	G	T
Methane	C	T
Methyl Acetate	C	V
Methyl Alcohol, Methanol	G	E/T
Methyl Cellosolve (Ether)	G	V
Methyl Chloride	C	O
Methyl Cyclopentane	C	V
Methyl Ethyl Ketone	C	E
Methyl Isobutyl Carbinol	G	E
Methyl Isobutyl Ketone	NR	—
Methylene Chloride	C	O
Methylene Dichloride 100°F/38°C	G	O
MIL-L7808	G	O
MIL-05606	G	O
MIL-08515	G	O
Milk	G	A
Mineral Oils	G	T
Naptha, 160°F/71°C	G	O
Napthalene	NR	—
Napthenic Acid	C	T
Natural Gas	C	T
Nevoil	G	E
Nickel Acetate to 10%, 100°F/38°C	G	V
Nickel Ammonium Sulfate	G	V
Nickel Chloride	G	E/T
Nickel Nitrate	G	V
Nickel Plating Solution 125°F/52°C	G	E
Nickel Sulfate	G	E/T
Nicotine	C	V
Nicotine Acid	C	V
Nitric Acid to 10%, 75°F/24°C	G	E
Nitric Acid, 10-50%, 75°F/24°C	G	O
Nitric Acid, 50-86%, 75°F/24°C	C	O
Nitric Acid, Red Fuming	C	O
Nitrocellulose	G	V
Nitroethane	C	E

Chemical Composition	Rating Code	Gasket Grade
Nitromethane	G	E
Nitrous Oxide	G	E
Octyl Alcohol	G	V
Ogisogiric Acid, to 75%, 150°F/66°C	G	O
Oil, Crude Sour	G	T
Oil, Motor	G	T
Oleic Acid	G	T
Olive Oil	G	A
Oronite 8200 Silicate Ester Fluid	G	O
Orthodichlorobenzene	G	O
OS-45 Silicate Ester Fluid	G	O
OS-45-1	G	O
Oxalic Acid	G	E
Oxygen, Cold †	C	E
Ozone (100 ppm)	G	E
Palmitic Acid	G	T
Peanut Oil	G	A
Pentane	G	T
Perchloroethylene	G	O
Perchloric Acid	NR	—
Petroleum Ether (see Benzene)	G	O
Petroleum Oils	G	T
Phenol (Carbolic Acid)	G	O
Phenylhydrazine	C	E
Phenylhydrazine Hydrochloride	C	E
Phosphate Ester	G	E
Phosphoric Acid, to 50% and 70°F	G	E
Phosphoric Acid, to 85% and 200°F	G	O
Photographic Solutions	G	T
Phthalic Anhydride	G	E
Picric Acid, Molten	G	V
Plating Solutions (gold, brass, cadmium, copper, lead, silver, nickel, tin, zinc)	G	V
Polybutene	G	T
Polyvinyl Acetate, Solid (In Liquid State is 50% solution of Methanol or 60% solution of H2O)	G	E
Potassium Alum	G	E/T
Potassium Bicarbonate	G	E/T
Potassium Bichromate	G	T/E
Potassium Borate	G	E
Potassium Bromate	G	E
Potassium Bromide	G	E/T
Potassium Carbonate	G	E/T
Potassium Chlorate	G	E
Potassium Chloride	G	T
Potassium Chromate	G	T
Potassium Cyanide	G	E/T
Potassium Dichromate	G	E
Potassium Ferricyanide	G	E
Potassium Ferrocyanide	G	E
Potassium Fluoride	G	E
Potassium Hydroxide	G	T
Potassium Iodide	G	V
Potassium Nitrate	G	T
Potassium Perborate	G	E
Potassium Perchlorate	G	T
Potassium Permanganate, Saturated to 10%	G	E
Potassium Permaganate, Saturate 10-25%	G	E
Potassium Persulfate	G	T
Potassium Phosphate	G	V
Potassium Silicate	G	V/E/T
Potassium Sulfate	G	T
Potassium Thiosulfate	G	V
Prestone	G	T
Propane Gas	C	T
Propanol	G	E
Propargyl Alcohol	G	E

Chemical Composition	Rating Code	Gasket Grade
Propyl Acetate	C	V
Propyl Alcohol	G	T
Propylene Dichloride	C	L
Propylene Glycol	G	E
Pydraul F - 9 and 150	NR	—
Pyranol 1467	G	T
Pyranol 1476	G	T
Pyroguard "C"	G	T
Pyroguard "D"	G	T
Pyroguard 55	G	E
Pyrrole	G	E
Rapeseed Oil	G	A
Ref. Fuel (70 ISO Octane, 30 Toluene)	G	T
Rosin Oil	G	V/T
Salicylic Acid	G	E
Secondary Butyl Alcohol	G	T
Sewage	G	E/T
Silver Cyanide	C	V
Silver Nitrate	G	E
Silver Plating Solution	C	V
Silver Sulfate	G	E
Skydrol, 200°F/93°C	G	L
Skydrol 500 Phosphate Ester	C	E
Soap Solutions	G	E/T
Soda Ash, Sodium Carbonate	G	E/T
Sodium Acetate	G	E
Sodium Alum	G	T
Sodium Benzoate	G	E/T
Sodium Bicarbonate	G	E/T
Sodium Bisulfate	G	E/T
Sodium Bisulfite (Black Liquor)	G	E/T
Sodium Bromide	G	E/T
Sodium Carbonate	G	E/T
Sodium Chlorate	G	E
Sodium Chloride	G	E/T
Sodium Cyanide	G	E/T
Sodium Dichromate, to 20%	G	E/T
Sodium Ferricyanide	G	E/T
Sodium Ferrocyanide	G	E/T
Sodium Fluoride	G	E/T
Sodium Hydro Sulfide	G	T
Sodium Hydroxide to 50%	G	E
Sodium Hypochlorite, to 20%	G	E
Sodium Metaphosphate	G	T
Sodium Nitrate	G	E
Sodium Nitrite	G	E/T
Sodium Perborate	G	E
Sodium Peroxide	G	E
Sodium Phosphate, Dibasic	G	T
Sodium Phosphate, Monobasic	G	T
Sodium Phosphate, Tribasic	G	T
Sodium Silicate	G	T
Sodium Sulfate	G	E/T
Sodium Sulfide	G	T
Sodium Sulfite Solution, to 20%	G	T
Sodium Thiosulfate, "Hypo"	G	T
Sohovis 47	G	T
Sohovis 78	G	T
Solvasol #1	G	T
Solvasol #2	G	T
Solvasol #3	G	T
Solvasol #73	C	T
Solvasol #74	NR	—
Soybean Oil	G	A
Spindle Oil	G	T
Stannic Chloride	G	T
Stannous Chyoride, to 15%	G	T
Starch	G	T
Steam	NR	—
Stearic Acid	G	T
Stoddard Solvent	G	T

Chemical Composition	Rating Code	Gasket Grade
Styrene	G	O
Sucrose Solutions	G	A
Sulfonic Acid	G	E
Sulphite Acid Liquor	G	E
Sulfur	G	V/E
Sulfur Chloride	G	O
Sulfur Dioxide, Dry	C	E/T
Sulfur Dioxide, Liquid	G	E
Sulfur Trioxide, Dry	G	O
Sulfuric Acid, to 25%, 150°F/66°C	G	E
Sulfuric Acid, 25-50%, 200°F/93°C	G	O
Sulfuric Acid, 50-95%, 150°F/66°C	G	O
Sulfuric Acid, Fuming	C	O
Sulfuric Acid, Oleum	C	O
Sulfurous Acid	G	O
Tall Oil	C	T
Tannic Acid, All Conc.	G	V
Tanning Liquors (50 g. alum. solution, 50 g. dichromate solution)	G	T
Tartaric Acid	G	E
Terpineol	G	V
Tertiary Butyl Alcohol	G	V/E/T
Tetrabutyl Titanate	G	E
Tetrachloroethylene	G	O
Tetrahydrofuran	NR	—
Tetralin	NR	—
Thionyl Chloride	C	T
Terpineol	C	T
Thiopene	NR	—
Titanium Tetrachloride	G	O
Toluene, 30%	G	T
Transmission Fluid, Type A	G	O
Triacetin	G	T
Trichloroethane	G	O
Trichloroethylene, to 200°F/93°	G	O
Tricresyl Phosphate	G	E
Triethanolamine	G	E/T
Trisodium Phosphate	G	E
Tung Oil	G	T
Turbo Oil #15 Diester Lubricant	G	O
Turpentine	C	T
Urea	G	T
Vegetable Oils	G	A
Vinegar	G	A
Vinyl Acetate	G	E
Vi-Pex	G	T
Water, to 150°F/66°C	G	E/T/M/S
Water, to 200°F/93°C	G	E/M
Water, to 230°F/110°C	G	E
Water, Acid Mine	G	E/T
Water, Bromine	G	V
Water, Chlorine	C	E/M
Water, Deionized	G	E/M
Water, Seawater	G	E
Water, Waste	G	E/T/M/S
Whiskey	G	A
White Liquor	G	E
Wood Oil	G	T
Xylene	C	O
Zinc Chloride, to 50%	G	E
Zinc Nitrate	G	E
Zinc Sulfate	G	E/T

NOTE: The Grade "EHP" gasket can be used on all chemical, water and air services suitable for Grade "E" gaskets.

Gasket Selection Guide

Chemical Services

Services Not Recommended

The services listed below have been tested and are NOT RECOMMENDED with any of the presently available gasket materials. Services not shown as recommended or not recommended should be submitted to Victaulic for specific recommendations.

Chemical Composition	Rating Code
Acrylonitrile	NR
Allyl Chloride	NR
Amyl Chloride	NR
Anthraquinone	NR
Anthraquinone Sulfonic Acid	NR
Arylsulfonic Acid	NR
Butyne Diol	NR
Chloralhydrate	NR
Chlorobromomethane	NR
Chlorosulphonic Acid	NR
Ethylene Oxide	NR
Fluorine Gas Wet	NR
Freon 21	NR
Furan	NR
Gallic Acid	NR
Hydrogen Phosphide	NR
Lauryl Chloride	NR
Methyl Isobutyl Ketone	NR
Napthalene	NR
Perchloric Acid	NR
Pydraul F -9 and F - 150	NR
Solvasol #74	NR
Steam	NR
Tetra Hydrofuran	NR
Tetralin	NR
Thiophene	NR

Water and Air Services

	Rating Code	Gasket Grade
Air, Temp. –20°F to +200°F/ -29°C to +93°C (no oil vapors)	G	E
Air, Temp. –30°F to +230°F/ –34°C to +110°C (no oil vapors)	G	E
Air, Temp. +230°F to +350°F/ +110°C to +177°C (no oil vapors)	G	L
Air, Oil Vapor, Temp. 0°F to +150°F/ –18°C to 66°C	G	T
Air, Oil Vapor, Temp. +150°F to +300°F/+66°C to +149°C	G	O
Water, Temp. to +150°F/+66°C	G	E/T/M/S
Water, Temp. to +200°F/+93°C	G	E/M
Water, Temp. to +230°F/+110°C*	G	E
Water, Temp. to +250°F/+120°C	G	EHP
Water, Acid Mine	G	E/T
Water, Bromine	G	V
Water, Chlorine	C	E/M
Water, Deionized	G	E/M
Water, Seawater	G	E
Water, Waste	G	E/T/M/S

* Recommended for water only. Not recommended for steam service, except where couplings are accessible for frequent gasket replacement.

NOTE: The Grade “EHP” gasket can be used on all chemical, water and air services suitable for Grade “E” gaskets.

Gasket Selection Guide

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

INSTALLATION

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Gasket Selection Guide

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