Grooved Gasket Specifications
Chemical Resistance for Industrial Choice Grooved Fittings!




Standard Gaskets

Grade	Temp. Range	Compound	Color Code	General Service Applications
E	-30°F to +230°F (-34°C to 110°C)	Pre-Lubricated EPDM	Green Stripe	Water, dilute acids, alkalies, salts, and many chemical services not involving hydrocarbons, oils, or gases. Excellent oxidation resistance. **NOT FOR USE WITH HYDROCARBONS, LUBRICANTS OR OILS**
T	-20°F to +180°F (-29°C to 82°C)	Nitrile (Buna-N)	Orange Stripe	Petroleum products, vegetable oils, mineral oils and air contaminated with petroleum oils. **NOT FOR USE IN HOT WATER SERVICES.**
O	+20°F to +300°F (-6°C to 149°C)	Fluoroelastomer	Blue Stripe	High temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halogenated hydrocarbons, and lubricants.

Gasket Grades – Common Applications

Water and Air Service	Gasket Grade
Air, (no oil vapors) Temp. -40°F to 230°F (-40° to 110°C)	E
Air, Oil vapor Temp. -20°F to 150°F (-29°C to 66°C)	T
Air, Oil vapor Temp. 20°F to 300°F (-7°C to 149°C)	O
Water, Temp. to 150°F (66°C)	E/T*
Water, Temp. to 230°F (110°C)	E
Water, Acid Mine	E/T*
Water, Chlorine	E/O*
Water, Deionized	E/T*
Water, Seawater	E/T*
Water, Waste	E/T*
Water, Lime	E/T*

Petroleum Products Service	Gasket Grade
Crude Oil - Sour	T
Diesel Oil	T
Fuel Oil	T
Gasoline, Leaded	T
Gasoline, Unleaded	O
Hydraulic Oil	T
JP-3, JP-4, and JP-5	T/O*
JP-6, 100°F (38°C) Maximum Temp.	T
Kerosene	T
Lube Oil, to 150°F (66°C)	T
Motor Oil	T
Tar and Tar Oil	T
Transmission Fluid - Type A	O
Turbo Oil #15 Diester Lubricant	O

Chemical Composition	Gasket Grade
Acetaldehyde	E
Acetamide	T
Acetic Acid up to 50%	NR
Acetic Acid, Glacial	NR
Acetic Anhydride	E
Acetone	E
Acetonitrile	T
Acetophenone	E
Acetylene	E/T
Acrylonitrile	NR
Adipic Acid	T
Air, oil free	E
Air with vapored oil	T
Alkalis	E
Allyl Alcohol to 96%	E
Allyl Chloride	NR
Aluminum Chloride	E/T
Aluminum Fluoride	E/T/O
Aluminum Hydroxide	E/O
Aluminum Nitrate	E/T
Aluminum Phosphate	E
Aluminum Salts	E
Aluminum Sulfate	E/T
Alums	E/T
Ammonia Anhydrous (Pure Ammonia)	NR
Ammonia, Gas, Cold	E
Ammonia, Aqua, 10 - 25%	E
Ammonium Bifluoride	T
Ammonium Carbonate	E
Ammonium Chloride	E/T
Ammonium Fluoride,	E
Ammonium Hydroxide	E
Ammonia Liquid	E
Ammonium Metaphosphate	E
Ammonium Nitrate	E/T
Ammonium Nitrite	E
Ammonium Persulfate, to 10%	E
Ammonium Phosphate	T
Ammonium Sulfamate	T
Ammonium Sulfate	E/T
Ammonium Sulfide	E
Ammonium Thiocyanate	E
Amyl Acetate	E
Amyl Alcohol	E
Amyl Chloride	NR
Anderol	O
Aniline	E
Aniline Oil	E
Anthraquinone	NR
Anthraquinone Sulfonic Acid	NR
Antimony Chloride	E
Antimony Tricholoride	E
Argon Gas	E/O
Aroclors	O
Arsenic Acid, to 75%	T/O
Arylsulfonic Acid	NR
ASTM #1, 2 & 3 Oil	T
Barium Carbonate	E
Barium Chloride	E/T
Barium Hydroxide	E/T

Chemical Composition	Gasket Grade
Barium Sulfide	T
Benzene	O
Benzol	O
Benzyl Alcohol	E
Benzyl Benzoate	E
Benzyl Chloride	E
Black Sulfate Liquor	T
Bleach, 12% Active Cl2	E
Borax	E/O
Bordeaux Mixture	E
Boric Acid	E/T
Bromine	O
Bromotoluene	NR
Butanol (see Butyl Alcohol)	E/T
Butyl Acetyl Ricinoleate	E
Butyl Alcohol	E/T
Butyl Stearate	T
Butylene	T/O
Butylene Glycol	E
Butyne Diol	NR
Calcium Bisulfate	T/O
Calcium Bisulfide	T/O
Calcium Bisulfite	T
Calcium Carbonate	E/T
Calcium Chlorate	E/T
Calcium Chloride	E/T
Calcium Hydroxide (Lime)	E/T
Calcium Hypochlorite	E
Calcium Hypochloride	E
Calcium Nitrate	E/T
Calcium Sulfate	E/T
Calcium Sulfide	E/T
Caliche Liquors	T
Carbitol "	E/T
Carbon Dioxide, Dry	E/T
Carbon Dioxide, Wet	E/T
Carbon Disulphide	O
Carbon Monoxide	E
Carbon Tetrachloride	O
Carbonic Acid, Phenol	O
Caster Oil	T
Caustic Potash	E
Cellosolve	E
Cellulose Acetate	E
Cellulube 220 (Tri-Aryl-Phosphate)	E
Cellulube Hydraulic Fluids	E
China Wood Oil, Tung Oil	T
Chloralhydrate	NR
Chloroacetone	E
Chlorobenzene	O
Chlorobromomethane	NR
Chloroform	O
Chlorosulphonic Acid	NR
Chrome Alum	E/T
Chromic Acid, to 10%	O
Chromic Acid, to 25%	O
Chrome Plating Solutions	O
Citric Acid, Saturated	E
Coke Oven Gas	T/O
Copper Carbonate	E/T

Chemical Composition	Gasket Grade
Copper Chloride	E/T
Copper Cyanide	E/T
Copper Fluoride	E
Copper Nitrate	E/T
Copper Sulfate	E/T
Cresole, Cresylic Acid	O
Creosote, Coal Tar	T/O
Creosote, Wood	T/O
Cupric Fluoride	E/T
Cupric Sulfate	E/T
Cyclohexane Alycyclic (Hydrocarbon)	O
Cyclohexanol	O
Dextrim	T
Dibutyl Phthalate	E
Dichloro Difloro Methane	T
Diesel Oil	T
Diethyl Sebacate	E
Diethylamine	T
Diethylene Glycol	E/T
Digester Gas	T
Dimethylamine	T
Dioctyl Phthalate	E
Dioxane	E
Diproplylene Glycol	T
Dowtherm A	O
Dowtherm E	O
Dowtherm SR-1	T/E
Ethanolamine	E
Ethers	NR
Ethyl Acetoacetate	E
Ethyl Acrylate	NR
Ethyl Alcohol (Ethanol)	E
Ethyl Chloride	E/T
Ethyl Ether	T
Ethyl Oxalate	E
Ethyl Silicate	T
Ethylene Chlorohydrin	E
Ethylene Diamine	E/T
Ethylene Dichloride (Dichloroethane)	O
Ethylene Glycol	E/T
Ethylene Oxide	NR
Ferric Chloride, to 35%	E/T/O
Ferric Chloride, Saturated	NR
Ferrous Sulfate	T
Fluboric Acid	E
Fluorine Gas, Wet	NR
Fly Ash	E
FM200	E
Foam	E
Formaldehyde	E/T
Formanide	T
Formic Acid, to 25%	E
Freon 11, 130°F (54°C) Max.	T
Freon 12, 130°F (54°C) Max.	T
Freon F-12	T
Freon 123	NR
Freon 134a, 176°(80°C)	E/T
Freon F-21	NR
Freon 113 130°F/54°C	T
Freon 114,130°F/54°C	T

Chemical Composition	Gasket Grade
Fructose	T
Fuel Oil	T
Fumaric Acid	E
Furan	NR
Furfuryl Alcohol	E
Gallic Acid	NR
Gasoline, Refined	T
Gasoline, Unleaded	O
Glue	T
Glycerine	E/T
Glycerol	E/T
Glycol	E/T
Grease	T/O
Green Sulfate Liquor	T
Halon 1301	E
Heptane	T
Hexaldehyde	E
Hexane	T
Hexanol	T
Hexanol Tertiary	T
Hexyl Alcohol	T
Hexylene Glycol	T
Hydrobromic Acid, to 40%	E
Hydrochloric Acid, to 36%, 75°F (24°C) – Max.	E
Hydrocyanic Acid, to 10%	E
Hydrofluoric Acid, to 30%	O
Hydrofluosilicic Acid, to 50%	T
Hydrogen Phosphide	NR
Hydrogen Sulfide.	E
Hydroquinone	T/O
Hypochlorous Acid, Dilute	E
Isobutyl Alcohol	E
Iso Octane, 100°F/38°C	T
Isopropyl Acetate	E
Isopropyl Alcohol	E
Jet Fuel, JP-4	T/O
Jet Fuel, JP-5	T/O
Kerosene	T
Latex (1% Styrene & Butadiene)	O
Lauric Acid	T
Lauryl Chloride	NR
Lavender Oil	T
Lead Acetate	E/T
Lead Sulfate	T
Lime and H^2O	E/T
Lime Sulfur	O
Linoleic Acid	O
Lithium Bromide (Brine)	T/O
Lithium Chloride	T/O
Lubricating Oil, Refined	T
Lubricating Oil, Sour	T
Lubricating Oil, to 150°F/66°C	T
Magnesium Chloride	E/T
Magnesium Hydroxide	E/T
Magnesium Nitrate	E
Magnesium Sulfate	E/T
Maleic Acid, Saturated	T
Malic Acid	T
Mercuric Chloride	E/T

Chemical Composition	Gasket Grade
Mercuric Cyanide	E/T
Mercurous Nitrate	E/T
Mercury	E/T
Methane	T
Methyl Alcohol, Methanol	E/T
Methyl Isobutyl Ketone	NR
Methyl Isobutyl Carbinol	E
Methylene Chlorobromide	NR
Methylene Dichloride	O
MIL-05606	O
MIL-08515	O
MIL-L7808	O
Mineral Oils	T
Naphta	O
Naphtalene	NR
Nickel Chloride	E/T
Nickel Plating Solution, 125°F (52°C) – Max.	E
Nitric Acid, to 10%, 75°F (24°C) – Max.	E
Nitric Acid, 10%-50%, 75°F (24°C) – Max.	O
Nitrogen	E
Nitromethane	E
Nitrous Oxide	E
Ogisogiric Acid, to 75%	O
Oil, Crude Sour	T
Oil, Motor	T
Oleic Acid	T
Olive Oil	T
Oronite 8200 Silicate Ester Fluid	O
Orthodichlorobenzene	O
OS-45 Silicate Ester Fluid	O
OS-45-1	O
Oxalic Acid	E
Ozone (100 ppm)	E
Palm Oil	T
Perchloric Acid	NR
Perchloroethylene	O
Petroleum Ether (see Benzene)	O
Petroleum Oils	T
Phenol (Carbolic Acid)	O
Phosohoric Acid, to 50%, 70°F (21°C) – Max.	E
Phosohoric Acid, to 85%, 150°F (66°C) – Max.	O
Phosphate Ester	E
Photographic Solutions	T
Phthalic Anhydride (gold, brass cadmium,copper, lead, silver, tin, zinc)	E
Polybutene	T
Polyvinyl Acetate, Solid in Liquid State is 50% solution of Methanol or 60% solution of (H^2O)	E
Potash	E
Potassium Alum	E/T
Potassium Aluminum Sulfate	E/T
Potassium Bicarbonate	E/T
Potassium Bichromate	E/T
Potassium Borate	E

Chemical Composition	Gasket Grade
Potassium Bromate	E
Potassium Bromide	E/T
Potassium Carbonate	E/T
Potassium Chlorate	E
Potassium Chloride	T
Potassium Chromate	T
Potassium Cyanide	E/T
Potassium Dichromate	E
Potassium Ferrocyanide	E
Potassium Fluoride	E
Potassium Hydroxide	T
Potassium Nitrate	E/T
Potassium Perborate	E
Potassium Perchlorate	T
Potassium Permanganate, to 10%	E
Potassium Permanganate, to 25%	E
Potassium Persulfate	T
Potassium Silicate	E/T
Potassium Sulfate	E/T
Prestone	T
Propane Gas	T
Propanol	E
Propargyl Alcohol	E
Propyl Alcohol	E/T
Propylene Dichloride	L
Propylene Glycol	E
Pydraul F-9 and F-150	NR
Pyroguard "C"	T
Pyroguard "D"	T
Pyroguard 55	E
Pyrrole	E
Ref. Fuel (ISO Octane, 30 Toluene)	T
Rosin Oil	T
Salicylic Acid	E
Secondary Butyl Alcohol	T
Sewage	E/T
Silver Nitrate	E
Silver Sulfate	E
Skydrol 200oF (93oC)-Max.	NR
Soap Solutions	E/T
Soda Ash, Sodium Carbonate	E/T
Sodium Acetate	E
Sodium Alum	T
Sodium Benzoate	E/T
Sodium Bicarbonate	E/T
Sodium Bisulfate	E/T
Sodium Bisulfite (Black Liquor)	E/T
Sodium Bromide	E/T
Sodium Carbonate	E/T
Sodium Chlorate	E
Sodium Chloride	E/T
Sodium Cyanide	E/T
Sodium Dichromate, to 20%	E/T
Sodium Ferricyanide	E/T
Sodium Ferrocyanide	E/T
Sodium Fluoride	E/T
Sodium Hydroxide, to 15%	E
Sodium Hydroxide, to 50%	E
Sodium Hypochlorite, to 20%	E
Sodium Metaphosphate	E/T

Chemical Composition	Gasket Grade
Sodium Nitrite	E/T
Sodium Nitrate	E
Sodium Perborate	E
Sodium Peroxide	E
Sodium Phosphate, Neutral	T
Sodium Silicate	T
Sodium Sulfate	E/T
Sodium Sulfide	E/T
Sodium Suplhite Solution, to 20%	T
Sodium Thiosulfate "Hypo"	T
Sohovis 47	T
Sohovis 78	T
Solvasol #1,2 & 3	T
Solvasol #73	T
Solvasol #74	NR
Spindle Oil	T
Stannic Chloride	T
Stannous Chloride, to 15%	T
Starch	E/T
Steam	NR
Stearic Acid	T
Stoddard Solvent	T
Styrene	O
Sulfur	E
Sulfur Chloride	O

Chemical Composition	Gasket Grade
Sulfur Dioxide, Dry	E
Sulfur Dioxide, Wet	E
Sulfuric Acid, to 25%, 150°F (66°C) – Max.	E
Sulfuric Acid, to 25-50%, 200°F (93°C) – Max.	O
Sulfuric Acid, to 50-95%, 150°F (66°C) – Max.	O
Sulfurous Acid	O
Tall Oil	T
Tanning Liquors(50g. alum. Solution, 50g. dichromate solution)	T
Tartaric Acid	
Tertiary Butyl Alcohol	E/T
Tetrachloroethylene	O
Tetrahydrofuran	NR
Tetralin	NR
Thiopene	NR
Titanium Tetrachloride	O
Toluene, to 30%	T
Transmission Fluid, Type A	O
Triacetin	T
Trichloroethane	O
Trichloroethylene	O
Triethanolamine	E/T

Chemical Composition	Gasket Grade
Trisodium Phosphate	E
Tung Oil	T
Turbo Oil #15 Diester Lubricant	O
Turpentine	T
Urea	T/E
Vinyl Acetate	E
Vinyl Chloride	O
Vi-Pex	T
Water, to 150°F/66°C	E/T
Water, to 200°F/93°C	E
Water, to 230°F/110°C	E
Water, to 250°F/120°C	E
Water, Acid Mine	E/T
Water, Bromine	O
Water, Chlorinated, to 3500ppm	E
Water, Deionized	E
Water, Potable	E
Water, Seawater	E
Water, waste	E/T
White Liquor	E
Wood Oil	T
Zinc Chloride, to 50%	E
Zinc Nitrate	E
Zinc Sulfate	E/T

Notes:

- Recommended gasket grades shown are from information supplied by manufacturers of elastomers and rubber compounds, as well as technical and industry publications.
- This information is presented for evaluation purposes and does not constitute a guarantee for specific service conditions.
- When more than one gasket grade is shown, the preferred gasket grade is listed first.
- Unless otherwise noted, all gasket listings are based upon 100°F (38°C) maximum temperature service conditions
- NR = Not Recommend