Chemical Resistance of THERMa-PUR™ Gasket Material

Key: A = Little to No Effect
B - Minor to Moderate Effect (Depends on Application)
C = Unsuitable
X = No data or insufficient evidence

CONTACT GARLOCK APPLICATIONS ENGINEERING FOR OTHER SERVICES

MEDIUM	
Acetic Acid (Crude, Glacial, Pure)	A*
Acetic Anhydride	A*
Acetone	A*
Acrylic Acid	A*
Air	A
Ammonia	
Gas, 150°F and below	A
Gas, Above 150°F	A*
Liquid, Anhydrous	A
Ammonium Chloride	A
Asphalt	A
Aviation Gasoline	A*
Benzene, Benzol	A*
Bio-Diesel (B100)	A*
Black Sulfate Liquor	B
Bleach (Sodium Hyprochlorite)	A*
Boiler Feed Water	A
Brine (Sodium Chloride)	A
Bromine	C
Butane	A
Butyl Alcohol, Butanol	A
Calcium Chloride	A
Calcium Hydroxide	B
Calcium Hypochlorite	A*
Carbon Dioxide	
Dry	A
Wet	A
Carbon Monoxide	A
Carbon Tetrachloride	A*
Castor Oil	A
Caustic Soda	C
Chlorinated Solvents, Dry	A*
Chlorinated Solvents, Wet	B
Chlorine	
Dry	A*
Wet	A*
Chlorine Dioxide	A*
Citric Acid	A
Corn Oil	A
Cotton Seed Oil	A
Creosote	A
Crude Oil	A
Detergent Solutions	A
Diesel Oil	A

Dowfrost	A*
Dowfrost HD	A*
Dowtherm 4000	A*
Dowtherm A	A*
Dowtherm E	A*
Dowtherm G	A*
Dowtherm HT	A*
Dowtherm J	A*
Dowtherm Q	A*
Dowtherm SR-1	A*
E85 (85% Ethanol, 15% Gas)	A*
Ethyl Alcohol	A
Ethylene	A*
Ethylene Glycol	A
Fluorine	C
Fluorosilicic Acid	C
Formaldehyde	A*
Fuel Oil	A
Gasoline	
Refined	A
Sour	A*
Glycerine, Glycerol	A
Glycol	A
Grain Alcohol	A
Grease, Petroleum Base	A
Heptane	A
Hexane	A
Hydraulic Oil	
Mineral	A
Synthetic	A*
Hydrochloric Acid	B
Hydrocyanic Acid	A*
Hydrofluoric Acid	C
Hydrogen	A
Hydrogen Fluoride	C
Hydrogen Peroxide	
10%	A*
10-90%	A*
Isobutane	A
Isooctane	A
Isopropyl Alcohol	A
Jet Fuels (JP Types)	A
Kerosene	A
Lacquer Solvents	A*
Linseed Oil	A
Lubricating Oils	
Petroleum Base (Refined)	A
Petroleum Base (Crude)	A*
Synthetic	A*
Methane	A
Methanol	A
Methyl Alcohol	A
Methyl Ethyl Ketone	A*
Mineral Oils	A
Mobiltherm 600	A

Mobiltherm 603	A
Mobiltherm 605	A
Mobiltherm Light	A
MultiTherm OG-1	A
MultiTherm 503	A
MultiTherm IG-4	A
MultiTherm PG-1	A
Naphtha	A*
Natural Gas	A
Nitric Acid	B
NO*x*	
Nitric Oxide; Less than 1%	A*
Nitric Oxide; More than 1%	B
Nitrogen Dioxide; Less than 1%	A*
Nitrogen Dioxide; More than 1%	B
Octane	A
Oil, Animal and Vegetable	A
Oil, Petroleum	A
Phosphorous	B
Paraffin	A
Paratherm HE	A
Paratherm NF	A
Pentane	A
Petroleum Oils	
Crude	A*
Refined	A
PolyAlphaOlefin (PAO)	A
Propane	A
Propyl Alcohol	A
Salt Water	A
Soap Solutions	A
Sodium Chloride	A
Sodium Hydroxide	C
Sodium Hypochlorite	A*
Soybean Oil	A
Steam	
Saturated (to 50 psig) [1]	A
Superheated	A
Sulfuric Acid	B
Sulfurous Acid	B
Sulfur Dioxide	A*
Sulfur Trioxide; Less than 1%	A*
Sulfur Trioxide; More than 1%	B
Syltherm 800	A*
Syltherm XLT	A*
Therminol 44	A*
Therminol 55	A*
Therminol 59	A*
Therminol 60	A*
Therminol 66	A*
Therminol 75	A*
Therminol D12	A*
Therminol LT	A*
Therminol VP-1	A*
Therminol XP	A

Toluene	A*
Transformer Oil (Mineral Type)	A
Transmission Fluid A	A
Tung Oil	A
Turpentine	A
UCON Heat Transfer Fluid 500	A
UCON Process Fluid WS	A
Varnish	A*
Water	
Distilled	A
Return Condensate	A
Seawater	A
Wood Alcohol	A
Xceltherm 550	A*
Xceltherm 600	A
Xceltherm MK1	A*
Xceltyherm XT	A*
Xylene	A*

Last updated on 11/16/2011

***** Binder may be affected but gasket may be used with this media . Contact Application Engineering for details

1 Saturated Steam service guidelines:

- For optimum performance, use thinner gaskets when possible.
- Minimum recommended assembly stress = 4,800 psi.
- Preferred Assembly Stress = 6,000 psi to 10,000 psi.
- Retorque the bolts/studs prior to pressurizing the assembly. Never retorque a pressurized assembly.
- If service is superheated, contact Applications Engineering.

Notes: Assemblies for lethal /flammable services should be leak-tested to ensure an adequate seal is attained.