

Garlock Chemical Resistance Guide

MULTI-SWELL™ 3760 & LEAK-GARD™ 3750

Key:

A - Ideal for low pressure applications B - Fair, Depends on conditions; please contact Applications Engineering C - Unsuitable - - Insufficient Data- Contact Applications Engineering
Y - Gasket will swell N - Gasket will not swell M - Gasket may swell; customer evaluation is recommended

***NOTE: RATINGS ARE BASED ON AMBIENT TEMPERATURES AT INTERNAL PRESSURES TO 150 PSIG.
CONTACT GARLOCK APPLICATIONS ENGINEERING FOR OTHER SERVICES**

Medium	3750	Swell?	3760	Swell?
Acetic Acid (Crude, Glacial, Pure)	B ¹	M	B ¹	M
Acetic Anhydride	B ¹	M	B ¹	M
Acetone	B	M	B	M
Acrylic Acid	C	M	C	M
Air	A	N	A	N
Ammonia				
Gas, 150°F and below	A	M	A	M
Gas, Above 150°F	C	M	C	M
Liquid, Anhydrous	-	M	-	M
Ammonium Chloride	A	M	A	M
Asphalt	B	Y	B	Y
Aviation Gasoline	B	Y	B	Y
Beer	A ³	M	A ³	M
Benzene, Benzol	C	Y	C	Y
Bio-Diesel (B100)	A	Y	A	Y
Black Sulfate Liquor	C	M	C	M
Bleach (Sodium Hypochlorite)	C	M	C	M
Boiler Feed Water	A	N	A	Y
Brine (Sodium Chloride)	A	N	A	Y
Butane	B ¹	Y	B ¹	Y
Butyl Alcohol, Butanol	A	M	A	M
Calcium Chloride	A	M	A	M
Calcium Hydroxide	A	M	A	M
Calcium Hypochlorite	C	M	C	M
Carbon Dioxide				
Dry	A	M	A	M

Medium	3750	Swell?	3760	Swell?
Wet	A	M	A	M
Carbon Monoxide	B	M	B	M
Carbon Tetrachloride	C	M	C	M
Castor Oil	A	Y	A	Y
Caustic Soda	C	M	C	M
Chlorinated Solvents, Dry	C	M	C	M
Chlorinated Solvents, Wet	C	M	C	M
Chlorine				
Dry	C	M	C	M
Wet	C	M	C	M
Chlorine Dioxide	C	M	C	M
Citric Acid	A	M	A	M
Corn Oil	A	Y	A	Y
Cotton Seed Oil	A	Y	A	Y
Creosote	B	Y	B	Y
Crude Oil	A	Y	A	Y
Detergent Solutions	B	M	B	M
Diesel Oil	A	Y	A	Y
Dowfrost	B	N	B	N
Dowfrost HD	B	N	B	N
Dowtherm 4000	B	N	B	N
Dowtherm A	C	Y	C	Y
Dowtherm E	C	Y	C	Y
Dowtherm G	C	Y	C	Y
Dowtherm HT	C	Y	C	Y
Dowtherm J	C	Y	C	Y

Medium	3750	Swell?	3760	Swell?
Dowtherm Q	C	Y	C	Y
Dowtherm SR-1	B	N	B	N
E85 (85% Ethanol, 15% Gas)	A	Y	A	Y
Ethyl Alcohol	A ³	N	A ³	N
Ethylene	B	M	B	M
Ethylene Glycol	A	N	A	N
Formaldehyde	B ¹	M	B ¹	M
Fuel Oil	A	Y	A	Y
Gasoline				
Refined	B	Y	B	Y
Sour	B	Y	B	Y
Glycerine, Glycerol	A	M	A	M
Glycol	A	M	A	M
Grain Alcohol	A ³	M	A ³	M
Grease, Petroleum Base	A	Y	A	Y
Heptane	B	Y	B	Y
Hexane	B	Y	B	Y
Hydraulic Oil				
Mineral	A	Y	A	Y
Synthetic	B	M	B	M
Hydrochloric Acid	C	M	C	M
Hydrocyanic Acid	B	M	B	M
Hydrofluoric Acid	C	M	C	M
Hydrogen	A	M	A	M
Hydrogen Peroxide				
10%	B	M	B	M
10-90%	-	M	-	M
Isobutane	B	Y	B	Y
Isooctane	B	Y	B	Y
Isopropyl Alcohol	A	N	A	N
Jet Fuels (JP Types)	B	Y	B	Y
Kerosene	B	Y	B	Y
Lacquer Solvents	C	M	C	M
Linseed Oil	A	Y	A	Y
Lubricating Oils				
Mineral or Petroleum Types	A	Y	A	Y
Refined	A	Y	A	Y
Sour	B	Y	B	Y
Methane	B ¹	Y	B ¹	Y
Methanol	A	M	A	M
Methyl Alcohol	A	M	A	M
Methyl Ethyl Ketone	C	M	C	M

Medium	3750	Swell?	3760	Swell?
Mineral Oils	A	Y	A	Y
Mobiltherm 600	B	Y	B	Y
Mobiltherm 603	B	Y	B	Y
Mobiltherm 605	B	Y	B	Y
Mobiltherm Light	B	Y	B	Y
MultiTherm 100	B	Y	B	Y
MultiTherm 503	C	Y	C	Y
MultiTherm IG-2	B	Y	B	Y
MultiTherm PG-1	B	Y	B	Y
Naphtha	C	M	C	M
Natural Gas	B ¹	Y	B ¹	Y
Nitric Acid	C	M	C	M
Octane	C	M	C	M
Oil, Animal and Vegetable	A	Y	A	Y
Oil, Petroleum	A	Y	A	Y
Paraffin	B	M	B	M
Paratherm HE	B	Y	B	Y
Paratherm NF	B	Y	B	Y
Pentane	B ¹	Y	B ¹	Y
Petroleum Oils				
Crude	A	Y	A	Y
Refined	A	Y	A	Y
PolyAlphaOlefin (PAO)	A	Y	A	Y
Propane	B ¹	Y	B ¹	Y
Propyl Alcohol	A	N	A	N
Refrigerants				
10	C	M	C	M
11	C	M	C	M
12	A	M	A	M
13	A	M	A	M
13B1	A	M	A	M
21	C	M	C	M
22	B	M	B	M
23	A	M	A	M
31	A	M	A	M
32	A	N	A	N
112	C	M	C	M
113	A	M	A	M
114	A	M	A	M
114B2	C	M	C	M
115	A	M	A	M
123	C	Y	C	Y

Medium	3750	Swell?	3760	Swell?
124	A	N	A	N
125	A	N	A	N
134a	A	N	A	N
141b	-	M	-	M
142b	A	N	A	N
143a	A	N	A	N
152a	A	N	A	N
218	A	M	A	M
290	C	M	C	M
500	-	M	-	M
502	A	M	A	M
503	A	M	A	M
507	-	N	-	N
717 (Ammonia)	B ¹	M	B ¹	M
744 (Carbon Dioxide)	A	N	A	N
C316	A	M	A	M
C318	A	M	A	M
HP62	-	M	-	M
HP80	-	M	-	M
HP81	-	M	-	M
Salt Water	A	N	A	Y
Soap Solutions	A	M	A	M
Sodium Chloride	A	M	A	M
Sodium Hydroxide	C	M	C	M
Sodium Hypochlorite	C	M	C	M
Soybean Oil	A	Y	A	Y
Steam				
Saturated (to 50 psig)	B ²	M	B ²	M
Superheated	C	M	C	M
Sulfuric Acid	C	M	C	M
Sulfurous Acid	B	M	B	M
Syltherm 800	B ¹	N	B ¹	N
Syltherm XLT	B ¹	N	B ¹	N
Therminol 44	C	Y	C	Y
Therminol 55	C	Y	C	Y
Therminol 59	C	Y	C	Y
Therminol 60	C	Y	C	Y
Therminol 66	C	Y	C	Y
Therminol 75	C	Y	C	Y
Therminol D12	B ¹	Y	B ¹	Y
Therminol LT	C	Y	C	Y
Therminol VP-1	C	Y	C	Y

Medium	3750	Swell?	3760	Swell?
Therminol XP	B ¹	Y	B ¹	Y
Toluene	C	Y	C	Y
Transformer Oil (Mineral Type)	A	Y	A	Y
Transmission Fluid A	A	Y	A	Y
Tung Oil	B	Y	B	Y
Turpentine	B	M	B	M
UCON Heat Transfer Fluid 500	B	N	B	N
UCON Process Fluid WS	B	N	B	N
Varnish	C	M	C	M
Water				
Distilled	A	N	A	Y
Return Condensate	B	N	B	Y
Seawater	A	N	A	Y
Tap	A	N	A	Y
Whiskey and Wines	A ³	M	A ³	M
Wood Alcohol	A	M	A	M
Xceltherm 550	C	M	C	M
Xceltherm 600	B	Y	B	Y
Xceltherm MK1	C	Y	C	Y
Xceltyherm XT	C	Y	C	Y
Xylene	C	Y	C	Y

>If fire resistant gaskets are required please consult Fire Tests under Gasket Terms, or contact Applications Engineering.

NOTES:

1. Consult the factory regarding your specific applications.
2. 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.
3. If a gasketing material that conforms to FDA requirements is desired, contact the factory for specific recommendations.