



PRODUCT DATA

310 HEAT CONDUCTIVE THERMOMASTIC

DESCRIPTION:

310 Thermomastic is a one-component, non-drying mastic material designed to provide an efficient, heat transfer material between adjacent metallic surfaces. It is designed to improve the coil efficiency in refrigeration systems. 310 is a soft, pumpable material that forms a surface skin while remaining pliable. It has excellent resistance to water, water vapor and temperature change.

310 Thermomastic is used in the refrigeration industry to increase the heat transfer area between refrigerator coils and refrigerated liner walls. It is less costly than soldering or brazing and allows coils to be attached to liner walls with low-cost mechanical fasteners. 310 also eliminates warping or stressing of liner walls from soldering heat.

310 Thermomastic is easy to apply with hand tools, caulking guns or suitable pumping systems. It does not require any heat for application and can be used wherever heat needs to be transferred between adjacent metal surfaces.

PROPERTIES:

Color (ASTM D-1729):	Tan
Odor:	None. Will not contaminate sweet butter.
Weight Per Gallon (ASTM D-71):	15.5 ± 0.5 pounds/gallon
Percent Solids (ASTM C-771):	> 99%
Percent Shrinkage:	< 1%
Low Temperature Flexibility (ASTM C-711):	No cracking, separation or loss of adhesion of a 3/8" diameter bead on galvanized steel bent at -60°F over a 1/2" mandrel.
Thermal Conductivity (ASTM F-433):	0.890 W/m-°K @ -4°C 6.170 Btu-in/h-ft ² -°F
Adhesion:	Adheres to most oily metal surfaces, painted and unpainted galvanized steel or aluminum. Tested per AAMA 809.2, paragraph 4.1.
Moisture Vapor Transmission (ASTM E-96):	< 1.0 g/day per square meter @ 0.5-mm (0.020-inch) thickness.
Slump (ASTM D-2202):	3/16" maximum at 210°F
Pumpability:	Extrusion Rheometer, 17 – 34 seconds @ 40 psi

Bubble Formation:	≤ 25% of surface after 72 hours at 160°F.
Weatherometer (ASTM D-750):	1,000 hours with no significant change in material.
Light Discoloration (ASTM D1148):	1,000-hours with no apparent change (S-1 sunlamp)
Staining and Corrosion:	1) No stain or corrosion when tested to ASTM D-925, Method A, 7-day contact stain. 2) No pitting or corrosion of aluminum or galvanized metal after 7-days aging of the sealant on metal in water @ 160°F, tested after a 24-hour cure @ 77°F.
Water Immersion:	Three weeks in water – no effect @ 120°F.
Substrate Compatibility:	No effects on wood, glass, aluminum or other metals.
Packaging:	10.3 fluid ounce cartridges, 5-gallon pails and 55- gallon drums.
Toxicity:	Non-toxic under normal use – do not take internally.
Flash Point (ASTM D-93):	> 350°F
Freight Classification:	Caulking compound – NOIBN – No red label required.

For technical assistance, customer service and general information please call:

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