



Solar Compounds Corporation
1201 West Blancke Street
Linden, NJ 07036 USA
Ph: 908-862-2813 Fax: 908-862-8061
Intnl: Ph: (0101) 908-862-2813 Fax: (0101) 908-862-8061
www.solarcompounds.com

TECHNICAL DATA SHEET

SOLARITE KM-4455 NON-CONDUCTIVE STRAND SEAL

USE: A light-weight polymer compound designed for the sealing of strands in water-tight power cables to prevent and absorb any water penetration.

DESCRIPTION: SOLARITE KM-4455 is a homogeneous non-hardening sealant composed of a synthetic elastomer and polymer, with inert fillers. It contains super-absorbent polymers. It does not contain asbestos, oil hydrocarbons, or low molecular weight plasticizers. All ingredients are virgin materials.

PHYSICAL PROPERTIES:

Color.....Black
Solids.....100%
Specific Gravity.....1.08 +/- 0.05
Penetration (.1mm).....55 to 75
(Cone, 300 Gms Load @ 77°F ASTM-D-217-48)
Melt Index @ 150°C.....55 to 75 Gms/10 Min
(Min. 2160 Gm Load, Preheat 10 Min., Run 30 Sec.)
Thermal Volumetric Expansion*
Through 440°F.....<10%

SPECIAL PROPERTIES:

- 1) No adverse effects on electrical or physical properties of high and low density polyethylene, synthetic elastomers, cross-linked polymers, PVC, EPR.
- 2) Non-injurious to semi-conducting shields.
- 3) Excellent heat stability.
- 4) Very low thermal volumetric expansion through 440°F.

- 5) Non-hydroscopic, excellent resistance to water, water vapor and salt water.
- 6) Compliance with ANSI 119.4 Connectability Standard.
- 7) Non-drying, remains plastic with no shrinkage upon aging.
- 8) Non-corrosive to metals.
- 9) Tenacious.
- 10) Non-brittle at -40°F.
- 11) Will not melt or flow at the higher temperatures.
- 12) Good adhesion to most clean, dry surfaces.
- 13) Little to no odor, non-toxic and non-irritating to the skin.

APPLICATION: Pumped with heavy duty, double action hydraulic drum ram equipment. Cone-shaped, heated follower plate and heated delivery lines recommended. Recommended processing temperatures--275°F to 300°F.

PACKAGING: 55-gallon drums, 5-gallon pails.

***THERMAL EXPANSION PROCEDURE:** Weigh 5 to 6 grams of material, form into a noodle, and place in cylinder of melt apparatus at room temperature. Load piston with a 2060 gram dead weight and depress until (1) extrudate passes thru the die and (b) the bottom engraved line is flush with the top of the guide collar. Plug die, turn Melt Index apparatus to maximum output and start stopwatch. Measure temperature and piston rise (in 64ths of an inch) to 440°F.

Using the calculations shown below, the increase in volume at 440°F shall not exceed 10 percent:

- 1) Area of Cylinder Base = 0.1110 Square Inches
- 2) Height of Cylinder Occupied by Sample at RT = 1.9063 Inches
- 3) Original Volume of Specimen = 1.9063 Inches x 0.1110 Square Inches or 0.2116 Cubic Inches

IMPORTANT:

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HEALTH CAUTION:

Please refer to Material Safety Data Sheet before using these products.

PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION.

FOR CHEMICAL EMERGENCY
CALL CHEMTREC (DAY OR NIGHT) 800-424-9300.