

## Adhesive & Sealant Specialist

Issuance Date : May 23, 2011 Revision Date : Nov 28, 2018 Revision No. : 18-04

# Technical Data Sheet

# BS-8620 / BS-8620S LM MS Sealant



#### **Features**

- ASTM C920 Compliant
- ISO 11600 (F Class 25 LM) Compliant
- ±50 % Movement Capability
- Good UV Resistance
- Paintable
- Low Static Charge (Less Dirt Streaking)
- Silicone-Oil Free (Non-Staining on Adjacent Substrates)
- Isocyanate-Free (No Air Bubbling)
- Solvent-Free (No Shrinkage)
- Primerless Bonding to Most Surfaces

#### **Available Colors**

- White
- Black
- Grey

#### **Packaging**

- 290 ml (cartridge)~20/carton
- 600 ml (sausage)~20/ carton

#### Storage

- Store in a dry and cool place with temperature below 30 °C
- From the date of production, 9 months in HDPE cartridge; and 12 months in aluminium foil sausage.

### **Product Specification**

Curing System : Moisture Curing Density : 1.53 - 1.58 g/mL Tack-Free / Skin-Form Time (at 25°C & 50% R.H.) : 20 - 60 minutes Tensile at Break (ASTM D412) :>1.0 N/mm<sup>2</sup> Elongation at Break (ASTM D412) : >500 % Shore A Hardness (ASTM C661) : 25 – 35 Joint Movement Capability (ASTM C719) : ±50 % Elastic Recovery (ISO 7389) : >70 % Cure Depth (24 Hours) at 23 °C, 50% Humidity : Approx. 3 mm VOC Content (USEPA Test Method 24) : <10 g/L **Application Temperature** : 5 °C to 40 °C : -20 °C to 90 °C Service Temperature

#### **Description**

A one-part, high-performance hybrid sealant that is based on advanced MS Polymer technology. It has excellent weathering, UV, and temperature resistance characteristics. The low VOC formula does not contain solvent & isocyanate hence will not face shrinkage and air bubbling issue. It is also free of silicone oil, reducing aesthetic issues caused by silicone oil-staining/streaking. The adhesion on various substrates is good even without primer, yet it is paintable with common industrial paints.

#### **Applications**

Ideal for sealing building concrete joints like wall panel joints, expansion joints, control joints, etc. It is also recommended for window frame perimeter sealing especially when painting of sealant is required. Facade systems designed with metal panels or natural stones can be sealed with this product too. Other common applications include sealing of anodized aluminum, finished wood, porcelain, coated metal, epoxy and polyester panels, polystyrene, UPVC, and stainless steel.

#### **Directions**

- 1. Surfaces must be clean, dry and free of dirt, grease, oil or water.
- Surfaces should be cleaned with alcohol, M.E.K. or other suitable solvent. Do not use soap or detergent.
- 3. For a neat finishing, apply masking tape and remove it before sealant skins over.
- 4. 602 Primer is recommended for porous substrates such as concrete for excellent adhesion.
- 5. Cut the tip off and puncture the internal foil seal with the nozzle. Cut the nozzle at 45° angle to desired bead-width and apply the sealant to substrate with a cartridge gun.
- 6. Tool the sealant before it skins.
- Uncured sealant can be cleaned up with mineral spirits.
- 8. Use approved backing material for joints over 10 mm deep.

#### **Joint Design**

- Joint dimension should be designed by taking into consideration the movement capability of the sealant and the anticipated joint movement
- Generally the joint width-to-depth ratio is 2:1 for joint width ≥12 mm, or 1:1 for joint width
  <12 mm</li>
- Joint width: minimum = 6 mm, maximum = 35 mm \*
- Joint depth: minimum = 6 mm, maximum = 12 mm
- \* Sealing joints with larger joint width is possible but sealant may sag in vertical applications.



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**BS-8620** 

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#### Coverage

Width	Depth	Coverage (290 ml) *	Coverage (600 ml) *
6 mm	6 mm	7.32 meter	15.15 meter
10 mm	10 mm	2.64 meter	5.45 meter
20 mm	10 mm	1.32 meter	2.73 meter
25 mm	12 mm	0.88 meter	1.82 meter

<sup>\*</sup> The coverage figures shown above are approximate lineal meter run based on 10% wastage assumption. Actual coverage may vary.

 $X / [(Y \times Z) \times 1.1] = Coverage$ 

X = volume of cartridge (or sausage) in ml,

Y = joint width in cm, Z = joint depth in cm,

1.1 = 10% wastage assumption,

Coverage = lineal meter run in cm per cartridge (or sausage)

#### Limitation

Not recommended for the following applications:

- Below waterline or permanent water immersion.
- Outdoor sealing/bonding adjacent to glass substrates.
- Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces.
- Overcoated with
  - Alkyd resin paint cure inhibition to the paint
  - Chlorinated paint staining issue
  - Oil based paint not compatible

Used in trafficable joints greater than 10 mm width. For trafficable joint above 10 mm width, a steel cover plate is required.

#### Caution

Keep out of reach of children. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

#### **Limited Warranty Information**

Bossil Technology provides material warranty for a duration of 5 years if the product is used within its shelf life and in compliance with industrial standard application procedures. Bossil Technology disclaims liability for any consequential or incidental loss or damages caused by incorrect usage. The material warranty only covers the replacement of the product without the other costs incurred, if the failure is proven to be directly related to the product within the warranty period. Material warranty will only be available once customer submits all the necessary documents and information, and an official material warranty letter is issued by Bossil Technology. Any claim of warranty shall be made directly to Bossil Technology in writing. Bossil Technology shall hold no responsibility until site inspection by representatives of Bossil Technology to confirm the alleged failure has been carried out.

Every endeavour has been made to ensure that the information given herein is true and reliable but it is given only for the guidance of our customers. The company cannot accept any responsibility for the loss or damage that may result from the use of the information, due to the possibility of variations of processing or working conditions and of workmanship outside our control. Users are advised to confirm suitability of this product by their own tests.

Calculation formula: