

# **Technical Data Sheet** BS-2500 / BS-2500S Metal & Glazing Sealant



#### Features

- 100% Neutral Silicone
- ±50% movement capability
- Food contact safe
- Permanently flexible
- Excellent Weathering Resistance
- Indoor & Outdoor Use

#### Specifications/Compliances

- ASTM C920 (Class 50)
- ASTM C719 (Class 50)
- FDA 21 CFR Part 175.300
- Low VOC
  - USEPA Method 24 (SCAQMD rule 1168)
- USEPA Method 310
- SVHC compliant
- LEED compliant

#### **Standard Colours**

- (T10) Translucent
- (W10) White
- (G10) Grey
- (B10) Black

#### **Special Colours**

(Made-to-Order)

- (A10) Aluminium
- (G11) Light Grey
- (G12) Dark Grey
- (P20) Pink

#### Packaging

- 300 ml (cartridge)~24/carton
- 600 gm (sausage)~20/ carton

## Storage

- Store in a dry and cool place with temperature below 30 °C.
- Use within 12 months from date of production.

## **Product Specification**

Curing System		: Moisture Curing, Neutral
Appearance		: Non-sagging Paste (Before Curing)
		: Elastic Rubber (After Cured)
Density		: 1.02 gm/ml
Slump	(ASTM D2202)	: <1 mm
Ultimate Tensile Strength	(ASTM D412)	: 1.7 N/mm²
Elongation at Break	(ASTM D412)	: 370 %
Shore A Hardness	(ASTM C661)	: 25
Movement Capability	(ASTM C719)	: ±50 %
VOC Content	(USEPA Test Method 24)	: 43.68 gm/L
	(USEPA Test Method 310)	: 0.86 %
Tack-free Time		: 10 – 30 minutes
Application Temperature		: -20 °C to 50 °C
Service Temperature		: -40 °C to 150 °C

## Description

A one-component, high performance, 100% neutral cure silicone sealant formulated to give superior adhesion and durability in a wide range of glazing, weather sealing and trade applications. It is compliant with **ASTM C920 and SCAQMD rule 1168**. It has excellent resistance to weathering, UV radiation, vibration, moisture, ozone, temperature extremes, airborne pollutants, and many cleaning detergents and solvents.

## Applications

Well-suited for sealing metal lap joints in roofing, guttering and cladding applications. It will bond to form a strong weatherproof seal on most common building materials such as aluminium, galvanized and zinc-coated steel, painted surfaces, glass, brick, concrete and mirror bonding.

## Directions

- 1. Surfaces must be clean, dry and free of dirt, grease, oil or water.
- 2. Surfaces should be cleaned with alcohol, M.E.K. or other suitable solvent. Do not use soap or detergent.
- 3. For a neat finish, apply masking tape and remove it before sealant skins over.
- 4. Cut nozzle at 45° angle to desired bead-width and apply to substrate with cartridge gun.
- 5. Tool the sealant within 10 minutes of extrusion before it skins. Tack-free in 20 minutes.
- 6. Uncured sealant can be cleaned up with mineral spirits.
- 7. Use approved backing material for joints over 10 mm deep.

## Joint Design

- The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.
- Generally calculation of the width sealant bead should be computed on the basis of a maximum ±50 % movement capability
- Minimum joint depth should not be less than 6 mm to accommodate movement.
- Sealant design joint width-to-depth ratio should be 2:1.



## BS-2500 Metal & Glazing Sealant

#### Coverage

Width	Depth	Coverage (300 ml) *
6 mm	6 mm	7.58 meter
10 mm	10 mm	2.73 meter
20 mm	10 mm	1.36 meter
25 mm	12 mm	0.91 meter

\* The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.

Calculation formula:

**X** / [(**Y** × **Z**) × 1.1] = *Coverage* 

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

 $\mathbf{Y}$  = joint width in cm,  $\mathbf{Z}$  = joint depth in cm,

1.1 = 10% wastage assumption,

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

## Limitation

Not recommended for following applications:

- Structural glazing applications.
- Below waterline or permanent water immersion.
- Traffic areas subject to abrasion.
- Polycarbonate and polyacrylate, if under tension.
- Applications that requires the sealant to be painted.
- Neoprene rubber.

#### Caution

Product releases methylethylketoxime during application and curing. May cause an allergic skin reaction. Avoid breathing vapours. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. IF ON SKIN: Wash with soap and water. If skin irritation or a rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. 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 10 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.