

## Technical Data Sheet

# **BOSCOSIL** 616

## NEUTRAL CURE SILICONE SEALANT

### **PRODUCT**

BOSCOSIL 616 is a high performance, NEUTRAL cure construction silicone sealant. It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant.

### DESCRIPTION

BOSCOSIL 616 is a neutral cure silicone sealant for use in metal fabrication, weather sealing, all metal and construction sealant as wall cladding, metal roofing, guttering, bonding etc.

### RECOMMENDED USES

- Weatherseal between glass and aluminum
- Wood
- Perimeter seal between aluminum window frames and brick and masonry

### FEATURES & BENEFITS

- Outstanding Adhesion
- Non Sag
- Non Odour
- Low shrinkage

## PERFORMANCE PROPERTIES

## **System Properties**

Properties	Result
Specific Gravity (20°C)	$1.0 \pm 0.2$
Skin Time	10-15 mins
Tack Free Time	< 60mins
Sag or Slump	Nil
Tooling Time	10 mins

**Cured Properties** 

Properties	Result	Test Method
Shore A Hardness	20-30	JIS A
Elongation	390%	JIS K6301
Tear Strength	3.0N/mm	ISO34,Method C
Tensile Strength	16kgf/cm <sup>2</sup>	JIS K6301
Joint Movement	+25%	
Application	-10°C to	
Temperature	+40°C	
Service	-40°C to	
Temperature	+ 200°C	

#### PACKAGING

BOSCOSIL silicone is available in standard cartridges.

#### COLORS

Translucent, White, Grey, Black and others special colors

### APPLICATION INSTRUCTION

## Joint Design

The sealant must be capable of withstanding the expected joint movement. The dynamic movement capability of Boscosil 616 is ±25%. The joint design must avoid three sided adhesion. The sealant depth for a weatherseal is normally half of the joint width. The minimum acceptable joint depth is 6mm; therefore, if the required joint width is 6mm the depth is also 6mm.

## Back Up Material

Use a closed cell PE Backer rod, 25% larger than the joint width to control the depth of the joint.

### Compatibility with adjacent substrates

Silicones are not always compatible with plasticized sealant, such as butyls. Also some backing rod and glazing tapes contain bitumen or other agents that are incompatible with the silicone. The incompatible may cause discoloration, poor adhesion, poor sealant cure or long term degradation of the sealant. Always carry out compatibility test where contact with potentially incompatible material occurs

## Application

- Always ensure that the surfaces to be sealed are dry and free from oil, dirt and grease.
- Use suitable solvent such as IPA or Mineral Spirits.
- For Porous surface, abrade the surface to remove loose particles and surface contaminants.
- Insert a sealant support material such as PE Backer Rod into deep joints or gaps to ensure sealant depth is not greater than 15mm.



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- Cut Nozzle at 45° angle to desire thickness.
  Cut diaphragm on cartridge. Insert cartridge into caulking gun. Hold gun at 45° angle with nozzle contact with both side of joint.
  Apply by pushing sealant ahead of nozzle, thus ensuring sealant is pushed firmly into place.
- Smooth off before skin forms (within 15 minutes). Remove excess sealant immediately with a cloth dampened with mineral turpentine. If used, remove masking tapes immediately sealant tooling is complete. Sealant surface skins less than 15 minutes and is touch dry in one hour.
- Cured sealant can be removed by trimming with a sharp blade but avoid under cutting seal.
- After use, cured plug will form in cartridge nozzle, before re-using remove plug and extrude sealant.

### STORAGE AND SHELF LIFE

- Always store the sealant in a cool dry place below 30°C.
- Shelf life is 12 months from the date of manufacture when stored below 25°C and below 50% relative humidity.

## LIMITATIONS

Boscosil 616 is NOT suitable for use in the following applications:-

- As the sealant requires atmospheric humidity to cure, it will not cure in totally confined spaces where it does not have access to atmospheric humidity.
- Aquariums
- Adhering Mirrors
- Structural Glazing
- Under Water Application (including swimming pools)
- Below Grade Applications

- Stone ( We recommend the completion of a stain testing program before using any sealant on stone )
- Horizontal walkways
- This silicone is not paintable.

### Health and Safety

Boscosil 616 is not classified as Dangerous Good or Hazardous Substance according to the ADG Code and Work safe Australia respectively. The product however, should be used in accordance with good occupational, health and safety practices. May cause irritation if swallowed, moderately irritating to eyes. Repeated or prolonged skin contact may lead to irritation. High concentrations of vapor may irritate respiratory tract. Release methyl ethyl ketoxime (MEK) until fully cured.

Do not swallow and avoid contact with the skin as this may cause sensitization. If contact with the eyes occurs, wash eyes with copious quantities of water and consult a doctor if irritation persists.

The Material Safety Data Sheet defining the known hazards and describing the appropriate safety precautions with respect to the product is available through Bostik Findley Malaysia Sdn Bhd.

The representations and recommendations regarding the products are based on tests which we believe to be reliable. However, no guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with a limited warranty only and on the condition that purchasers will make their own tests to determine the suitability of the products for their particular purpose. Under no circumstances will Bostik Singapore be liable to anyone except for replacement of the products or refund of purchase price.

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