

# SILICONE N60

## Architectural Grade Silicone

**Silicone N60 is a premium grade neutral cure glazing weatherproofing silicone sealant. It has superior adhesion to painted and anodized aluminum & glass. The thixotropic nature of this product ensures that it will not slump in typical construction joints. Excellent U.V. Stability. Long life reliability. Silicone N60 has excellent natural aging stability. It will maintain its elastomeric joint sealant properties permanently, even under harsh conditions and temperature extremes.**

### Description

Silicone N60 is a high performance architectural grade glazing silicone. One component, non-flowing, Neutral cure, high modulus sealant. It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant.

### Uses

Two sided structural glazing. (Colours only on to aluminum substrate)  
 Fin Glazing. (all N60 colours including trans).  
 Sealing of Laminated and reflective glass  
 General glazing applications  
 Sealing of mirrors and splash backs (not vinyl backed)  
 Toughened Glass Assemblies  
 Weather Sealing in curtain walls and building facades  
 Weather Sealing of composite metal panels  
 Drinking Water – tank manufacturing.

### CLASSIFICATIONS/STANDARDS

Silicone N60 Silicone Glazing Sealant meets or exceeds the requirements of the following specification for a one – part sealant:

- AS-1288:2006
- ASTM C1184, Type S, Use G and O.
- C920: Type S Grade NS, Class 35, Use NT, A, G, O.
- GB-16776
- Meets Low VOC Rating – 47g/L (SCAQMD)
- AS/NZS4020-2005 – Drink water approved AWQC (Trans & Grey Only)
- ASTM C792

### PRODUCT CHARACTERISTICS

Colour	Translucent, White, Grey, Black, Silver & Matt Black
Tack Free Time	30 Minutes
Skin Time	8 Minutes
Tooling Time	8 Minutes
Slag or Slump	Nil
Coverage	Approximately 16 lineal metres per 300ml cartridge based on an average joint size of 6mm depth and 3mm width

Product code	SCS6000
Translucent	SCS6000C
White	SCS6000W
Grey	SCS6000G
Black	SCS6000B
Silver	SCS6000A



#### **TYPICAL PERFORMANCE DATA (approx.)**

Shore "A" hardness	22
100% Modulus	0.5 MPa
Tensile Strength	1.5 MPa
Elongation	500%
Peel Strength after UV through Glass	89N/25mm
Dynamic Movement Capacity	±35%
Accelerated Aging and Weathering (ASTM C792)	

Application temperature\* -10°C to 40°C

Service temperature -50 to 200°C

\* Application of the sealant at -10°C is permissible provided the surface to receive the silicone is dry and free of frost. The maximum service temperature listed is for transient temperature; the silicone sealant will deteriorate if subjected to these temperatures on a continuous basis.

#### **APPLICATION INSTRUCTIONS**

##### **SURFACE PREPARATION**

Surfaces to be sealed must be clean, dry and free of wax, grease, cutting oils or any loose or flaking materials.

Use the two-wipe process for impervious substrates. Ensure the cloths are clean and changed frequently, and use a suitable cleaner/solvent such as IPA or 100% White Spirits.

##### **APPLICATION**

When extruding the sealant cut the nozzle to the desired width, cut the tip off the cartridge, and apply the sealant firmly to ensure good contact between the sealant and the substrate.

Before the sealant has skinned, tool it off to ensure a good finish, and to improve the wetting out of the sealant to the substrate.

Clean / wipe off excess sealant with clean cloth or polyethylene scraper. Masking tape can be used. (Masking tape must be removed before skin over starts).

##### **JOINT DESIGN**

The sealant must be capable of withstanding the expected joint movement.

To calculate the joint width, establish the expected movement (expansion, contraction and shear movement) that the joint is required to withstand.

The joint movement capability of Silicone N60 is ±35%.

The joint design must avoid three-sided adhesion.

The recommended sealant depth to width ratio for a weather seal is normally half the joint width.

The minimum recommended joint depth is 6mm and the maximum is 15mm, ideally if the required joint width is 6mm the depth is also 6mm.

**Silicone N60 is recommended to be used only for 2 sided structural glazing including Fin glazing.**

##### **BACK UP MATERIAL**

Use a closed cell polyethylene-backing 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 sealants, such as butyls.

Also some backing rods and glazing tapes contain bitumen or other agents that are incompatible with the silicone.

The incompatibility may cause discoloration, poor sealant cure or long term degradation of the sealant. Always carry out compatibility tests where contact with potentially incompatible materials occurs.

##### **COVERAGE**

Approximately 16 lineal metres per 300ml cartridge based on an average joint size of 6mm depth and 3mm width.

##### **CURING TIME**

Silicone N60 cures by absorbing atmospheric moisture it will cure 2-3mm in the first 24hrs and to a depth of 7mm in 7 days.

Depending on the joint design it may take between 14-21 days before the silicone joint has fully cured. (Subject to temperature and atmospheric moisture) Lower atmospheric moisture reduces the curing rate.

### LIMITATIONS

Silicone N60 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
  - Under Water Applications on concrete, some plastic materials etc. (including swimming pools)
  - Some stones.
  - Below Grade Applications
  - Horizontal walkways.
  - Do not clean or treat the sealant with materials, cleaning agents or solvents, that may affect or discolour the sealant, particularly during product curing.
  - Polycarbonate sheeting
  - Sealant may discolour copper and brass.
  - This product is neither tested nor can be used for medical or pharmaceutical use.
  - Where building materials may bleed oil, plasticizers or solvents, some vulcanized rubbers and tapes.
- Surfaces subject to corrosion / oxidation -eg. mill aluminum.
- **This silicone is not paintable.**

### STORAGE & SHELF LIFE

Always store the sealant in a cool dry place. Ideal storage temperature is not more than 25°C. Prolonged storage at high temperatures may affect shelf life and ultimate performance. The shelf life of Silicone N60 is 12 months from the date of manufacture when stored below 23°C and below 50% relative humidity.

### HEALTH & SAFETY

Full product safety information required for safe use is not included in this data sheet. Before handling, read the separate Safety Data Sheet (SDS) and packaging for safe use. Always read the Technical Data Sheet and Safety Data Sheet (SDS) before opening or using this product. In case of product emergency refer to product labelling or SDS and contact phone numbers.

### FIRST AID

If accidentally swallowed or it gets into someone's eyes, contact a Doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 0800 764 766)

**SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.**

**EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)**

### Important Notice for Users

Suggestions for use should not be taken as an inducement to infringe any particular patent.