MACSIM®

Tradesmans Choice

MS601

MS POLYMER

Professional Sealant

Technical Data Sheet

DESCRIPTION

MS601 is a general purpose sealant based on advanced MS Polymer technology. It is a single-component elastomeric sealant with superior weathering, UV, and temperature resistance. This elastomeric sealant is permanently elastic upon curing and has a movement capability of 50%.

Specially formulated to achieve superior performance and low VOC, MS601 is able to comply to the stringent requirements of ASTM C920 as well as the SCAQMD rule #1168 (Architectural Sealant) for low VOC. It also gives good primer-less adhesion on most substrates.

Unlike polyurethane sealants, MS601 is solvent-less and isocyanate-free; ensuring that the cured sealant will not shrink or have bubbling issues. It is also free of silicone oil, minimising building aesthetic issues caused by oil-staining and dirt-streaking problems often associated with silicone sealants.

APPLICATIONS

MS601 is suitable for:

- Sealing concrete joints like wall panel joints, expansion joints, control joints.
- Window frame perimeter sealing especially when the sealant needs to be painted.
- Facade cladding designed with metal panels or natural stones can be sealed with this product too.

Substrates:

- Anodized Aluminum
- Masonry
- Porcelain
- Coated Metal
- Finished Wood
- Epoxy and Polyester panels
- UPVC
- Polystyrene
- Stainless Steel

ADVANTAGES

- ASTM C920/ ISO11600 compliant
- 50% movement capability
- Good UV resistance
- Low static charge – Less dirt streaking
- Silicone free – Paintable
- Isocyanate free – No air bubbling
- Solvent free – No shrinkage
- Reactive plasticizer – Non-staining
- Primer-less bonding to most surfaces

PRODUCT CHARACTERISTICS

Colour	Black; Grey; White
Appearance	Soft paste
Base	1-component MS Polymer
Curing Method	Moisture curing
Service Temperature	-30°C to +100°C
Product Codes 600mL Sausage	Black : 53PMSPSB Grey: 53PMSPSG White: 53PMSPSW

TYPICAL PROPERTIES

Movement Capability	50% (ASTM C719)
Elongation @ Break	600% (ASTM D 412)
Tack Free Time	30-60 minutes @ 25°C, 50% Relative Humidity
Shore A. Hardness	25-35 (ASTM C661)
Density	Approx. 1.55g/mL
Tensile Strength	>1.0 N/mm² (ASTM D 412)
Lap Shear Strength	>0.5 N/mm² (ASTM D1002)
Application Temperature	+5°C to +40°C
Low VOC Compliant	<10 g/L (USEPA Method 24)

INSTRUCTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting www.macsim.com.au.

Surface Preparation

Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water. Use the two-cloth method to clean if surface is dirty. For a neat finishing, use masking tapes and remove it within the working time. For sealant designs with depths of over 10 mm, use approved backing materials.

Priming

Primer is recommended especially for porous substrates such as concrete for excellent adhesion.

Applications Instructions

1. Cut the tip of the sausage carefully and slip it into the caulking gun.
2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
3. Place the nozzle into the caulking gun and screw tight.
4. Extrude the sealant with a single bead.
5. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

Limitations

MS601 is not suitable for the following applications

- Below waterline or permanent water immersion.
- Outdoor glass substrates sealing.
- Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces.
- Paintable with alkyd resin paint.
- Used on trafficable joints greater than 10 mm width. For trafficable joint above 10 mm width, a steel cover plate is required.

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 bead size should not be less than 3 mm to accommodate movement.
- Sealant design joint width-to-depth ratio should be 2:1.

Shelf Life

12 months shelf life when stored in a dry and cool place with temperature around 25ºC.

Cleaning

Wet sealants can be cleaned up with acetone or mineral spirits.
Cured sealants can only be removed mechanically.

HEALTH & SAFETY

Safety

Uncured adhesive causes skin and eye irritation upon contact.
Avoid contact with eyes, skin and mouth.
Use in well-ventilated area. In case of contact with eyes, flush with water immediately for 15 minutes. If irritation persists, seek medical attention.
Keep out of reach of children.
EUH208 - Contains 3-(2-Aminoethylamino) propyltrimethoxysilane. May produce an allergic reaction

If poisoning occurs, contact Poisons Information Centre: Australia: 13 11 26; New Zealand: 0800 764 766.

For more information and advice on the safe handling, storage and disposal of this product refer to the Safety Data Sheet. The can be acquired by visiting www.macsim.com.au

MACSIM® FASTENINGS PTY LTD
10 Wonderland Drive, Eastern Creek NSW 2766
1800 022 019 • macsim.com.au