MACSIM[®]

Tradesmans Choice

MS605

FIRESEAL 5

Polyurethane Sealant



Technical Data Sheet

DESCRIPTION

MS605 Fireseal 5 is a one-component, medium modulus polyurethane sealant that cures on exposure to atmospheric humidity and capable of enduring direct flame to certain degrees.

APPLICATIONS

MS605 Fireseal 5 is suitable for:

- Fire rated sealing and bonding application between many different construction materials.
- · Fire seal of movement and connection joints in floors.
- Joints between prefabricated construction materials.
- · Fire stop sealing and bonding of ventilation ducts, gutters.
- · For expansion joints between pre-cast concrete panels.

Substrates:

- Precast concrete panels
- Glass
- · Aluminium, light alloys and stainless steel
- · Other metals
- Wood
- Concrete

ADVANTAGES

- 4 Hours of fire resistance in certain conditions without using backfilling materials
- 25% movement capability
- · No surtace tackiness after full cure
- Does not pick up dirt
- No shrinkage
- Cures bubble free
- · Enhanced storage stability
- No sagging Thixotropic
- · Can be applied with handgun and tooled easily
- Paintable

STANDARDS

Meets or exceeds the requirements of the following specifications:

- The requirements of the VOC content specifications in LEED credit EQc4.1 "Low-emitting products" of SCAQMD rule 1168.
- The French VOC requirements for Class A+
- More than 4 hours of fire resistance according to EN 1366-4 in certain conditions without using backfilling materials.
- In compliance with AS 1530.4:2014 providing more than 4 hours of the fire resistance in certain conditions.
- M2 Fire Rating according to NF P 92-501 radiation test.

PRODUCT CHARACTERISTICS

600ml Sausage

Colour

Appearance
Thixotropic, non sag paste
Composition
Polyurethane
Curing Method
Moisture curing
Service Temperature
+5°C to +40°C
Product Codes
53FIRECRYLPU600

TYPICAL PROPERTIES				
Movement Capability	Total 25%			
Elongation @ Break	Approx. >600%			
Tack Free Time	60 minutes			
Curing Rate	30-60 min. (@ 23°C, 50% Relative Humidity)			
Rate of Cure	Min 2-5mm per day @ 23°C, 50% Relative Humidity			
Shore A. Hardness	35-40 After 28 days (ASTM C661)			
Density	1.20-1,25g/mL			
Tensile Strength	1.5-2.0 N/mm2 (ASTM D412)			
Application Temperature	+5°C to +40°C			
VOC Rating	34g/mL (3.4%)			
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NOTE: All data provided is based on 25°C and 50% Humidity Conditions & fully cured after 21 days

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.

Priming

It is advisable to conduct preliminary adhesion tests on substrates where the application is critical or if the adhesion performance is

Applications Instructions

- 1.Cut the tip off 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 degrees.
- 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.

NOTE: If necessary use back up material to adjust joint depth. Sealants should adhere to only two surfaces of the joint: Use backer rods and bond breakers to facilitate.

Joint Design

Joint width/depth ratio should be 2:1 per 600ml sausage.

Joint Width	15mm	20mm	25mm	30mm	35mm
Joint Depth	8mm	10mm	12mm	15mm	15mm
Joint length	5meters	3meters	2meters	1.3meters	1.1meters

Limitations

MS605 Fireseal 5 is not suitable for the following applications:

- Confined spaces where sealant cannot cure due to lack of atmospheric moisture.
- Areas of constant water immersion.
- Frozen or wet surfaces orf throguh standing water.
- Prolonged exposure to direct sunlight can cause discolouring.
- Avoid application below 5 degrees celsius and above +40 degrees celsius.

Cleaning

Cured material removed by mechanical means only.

12 months shelf life when stored in a dry and cool place with temperature between +5°C and +25°C.

Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

HEALTH & SAFETY

Safety

Avoid breathing dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. If poisoning occurs, contact Poisons Information Centre: Australia: 13 11 26: New Zealand: 0800 764 766.

KEEP OUT OF REACH OF CHILDREN Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Handle under inert gas. Protect from moisture. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from any possible contact with water, because of violent reaction and possible flash fire.

First Aid

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Take off contaminated clothing and wash before reuse. In case of fire: Use alcohol resistant foam or normal protein foam for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

DISCLAIMER

The information in this Technical Data Sheet (TDS) is based on our present knowledge to the date of the publication. However, this shall not constitute a guarantee for any specific product features and shall not establish a ;legally valid contractual relationship. It is only a guide for safe handling, use, storage, transporting and disposal of the product.

