

FEATURES

VT-620 LM MS Sealant is a general-purpose sealant based on advanced MS Polymer technology. It is a single-component elastomeric sealant with excellent adhesion to various substrates such as concrete, precast walls, door frames, and window frames. Suitable for both interior and exterior applications, it offers excellent weather resistance.

- High flexibility, accommodating joint movement of $\pm 50\%$ (ASTM C920 Class 50)
- Paintable
- No shrinkage
- Free from silicone oil – non-staining, dust-free
- Isocyanate-free, no air bubbles in the sealant
- UV resistant
- Low VOC

PRODUCT INFORMATION

Product type	One-component MS Polymer
Physical state	Before cure –Non-sagging paste After cure –Elastic Rubber
Colours	White, Grey, and Black
Odor	No strong odor
Application areas	• Joints of wall panels, such as Precast and GRC • Joints between door/window frames and aluminum or cement surfaces • Concrete floor joints, and joints between walls and floors (e.g., post-tension floors) • Joints of aluminum composite panels (ACP) in façade applications • Joints on concrete or aluminum surfaces requiring painting • Wall cracks
Packaging	600 mL/sausage 20 sausages/carton

TECHNICAL INFORMATION

Curing system	Moisture curing
Application temperature	5°C - 40°C
Service temperature	-30°C - 90°C
Specific gravity	1.54 g/mL
Tack-free/Skin-form time	20-60 mins. (at 25 °C & 50% R.H.)
Cure depth	Approx. 3 mm (24 hours) at 23 °C, 50% humidity
Maximum tensile strength	1.1 N/mm ² ASTM D412
Elongation at break	600 % ASTM D412
Movement Capability	± 50 % ASTM C719
Slump	<1 mm ASTM D2202
Elastic Recovery	>70 % ISO 7389
Shore A Hardness	33 ASTM C661
VOC content	<10 g/L USEPA Method 24

REFERENCE STANDARD

- ASTM C920, Type S, Grade NS, Class 50, Use NT & M
- ISO 11600 F Class 25 LM
- FDA 21 CFR Part 175.300 (Food Contact Safe)
- Low VOC Compliance SCAQMD Rule #1168 - USEPA Method 24 & USEPA Method 310
- Sirim Test - ASTM D 412 : 2006
- RoHS I & RoHS II

APPLICATION

Surface preparation Application Direction

Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.

Sausages

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. For a neat finishing, use masking tapes and remove it within the working time.
4. For sealant designs with depths of over 10 mm, use approved backing materials.
5. Place the nozzle into the caulking gun and screw tight. Extrude the sealant with a single bead.
6. Tool the sealant bead with a clean and dry tool before the sealant skins for a smooth finishing.

Joint Design

- Joint width: minimum = 6 mm, maximum = 35 mm *
- Joint depth: minimum = 6 mm, maximum = 12 mm
- Generally, the joint width-to-depth ratio should follow the table below.

Width	Width (W) : Depth (D)
≥12 mm	2:1
<12 mm	1:1

* Sealing joints with larger joint width is possible but sealant may sag in vertical applications.

Coverage

Width, W	Depth, D	Coverage (600 ml)*
6 mm	6 mm	15.15 meter
10 mm	10 mm	5.45 meter
20 mm	10 mm	2.73 meter
25 mm	12 mm	1.82 meter

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

- Calculation formula:

$$\text{Coverage (cm)} = \text{volume of cartridge (or sausage) in ml} / [(\text{joint width(cm)} \times \text{joint depth(cm)}) \times 1.1]$$

Clean Up

Wet sealants can be cleaned up with acetone or mineral spirits.

Cured sealants can only be removed mechanically

Limitations

Not recommended for the following applications:

- Below waterline or permanent water immersion
- Overcoated with
 - Alkyd resin paint - cure inhibition to the paint
 - Acrylic solvent or old concrete primer: May become tacky, attract dust, and cause staining.

HANDLING AND STORAGE

Storage condition

Store the product in a dry, well-ventilated area. Keep the container tightly sealed at all times. It is not recommended to place the product outdoors or expose it to direct sunlight. If the product must be stored temporarily for transportation or relocation, it should be kept separately from other materials at an appropriate distance. Additionally, flammable materials such as oil-based paints and thinners should be stored separately from other types of substances.

Shelf life

1 year at 30-35 °C (If the product is not used completely, please ensure the tube is sealed tightly.)

SAFETY PRECAUTIONS

Precautionary notices are displayed on the container. Use product under well-ventilated area. Avoiding skin contact or inhale product. In case of contact with the eye, rinse with plenty of water immediately and seek medical advice. Remove splashes from the skin by using soap or water. For others information in terms of health and safety hazards for use of this product, please observe the Safety Data Sheet.

DISCLAIMER

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.

We reserve the right to alter the given without prior notice.

NOTE

The data are average values for reference only. However, the actual value depends on environmental conditions.