

Issuance date: 14/02/11

Revision date: 29/08/2025

Revision No.: 25-01

# VT-620 / VT-620S LM MS Sealant

## Low Modulus One-Component MS Sealant



### BASE

One-component  
MS Polymer

### PHYSICAL STATE

Non-sagging paste  
(before cure)

Elastic rubber  
(after cure)

### STANDARD COLOURS

(W10) White  
(G10) Grey  
(B10) Black

### SPECIAL COLOURS

(Made-to-Order)  
(G12) Dark Grey  
(G13) Graphene Grey  
(G14) Dark Grey  
(G15) Concrete Grey  
(G16) Trade Grey  
(B40) Beige  
(W11) Off White  
(R10) Redwood  
(S10) Sandstone  
(B32) Dark Bronze  
(T20) Teak

### TACK-FREE/ SKIN-FORM TIME

20 – 60 minutes  
(at 25 °C & 50% R.H.)

### PACKAGING

290 mL/cartridge  
(20 cartridges/carton)  
600 mL/sausage  
(20 sausages/carton)

### SHELF LIFE

12 months

### STORAGE

Store in a dry and cool  
place with temperature  
below 30 °C

### APPLICATION TEMPERATURE

5 °C – 40 °C

### SERVICE TEMPERATURE

-30 °C – 90 °C

### DESCRIPTION



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 property on various substrates like concrete. After curing, the sealant is permanently elastic and has a movement capability of ±50%.

It is able to comply with the stringent requirements of ASTM C920 as well as contribute to the Leadership in Energy and Environmental Design (LEED) v4.1 credit. Unlike polyurethane sealants, VT-620 is solvent-free 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.

### TECHNICAL DATA

Curing system	: Moisture curing
Specific gravity	: 1.54 g/mL
Ultimate tensile strength	: 1.1 N/mm <sup>2</sup>
Slump	: <1mm
Elongation at break	: 600 %
Shore A hardness	: 33
Movement capability	: ±50 %
Elastic recovery	: >70 %
Low VOC compliance	: Yes
VOC content	: < 10g/L
Cure depth (24 hours) at 23 °C, 50% humidity	: Approx. 3 mm

### FEATURES

- ±50 % Movement capability
- LEED compliant
- Better weathering resistance than PU sealants
- Paintable
- Low static charge – Less dirt streaking
- Isocyanate-free – No air bubbling
- Solvent-free – No shrinkage
- Primerless bonding to most surfaces

### APPLICABLE TEST / STANDARD

VT-620 meets the requirements of:

- ASTM C920, Type S, Grade NS, Class 50, Use NT, A & M
- Leadership in Energy and Environmental Design (LEED) v4.1 EQ compliant
- ISO11600 F Class 25 LM
- FDA 21 CFR Part 175.300, Food Contact Safe
- Low VOC - USEPA Method 24 & USEPA Method 310
- Sirim Test - ASTM D 412 : 2006
- RoHS I & RoHS II

### APPLICATION

Recommended for sealing concrete joints like precast wall panel joints, expansion joints, control joints, connection joints, etc. It is also ideal for window frame perimeter sealing especially when the sealant needs to be painted. Other recommended applications include sealing of GRC panel systems, anodized aluminium, masonry, porcelain, coated metal, finished wood, epoxy and polyester panels, UPVC, polystyrene, and stainless steel.

### PREPARATION

- Substrate surface must be clean, free of dirt, grease, oil, or standing water.
- For a neat finishing, use masking tapes and remove it within the working time.
- 602 Primer is recommended for porous substrates such as concrete for excellent adhesion.
- For sealant designs with depths of over 10 mm, use approved backing materials.

### APPLICATION DIRECTION

#### Cartridges:

1. Poke the cartridge's aluminium foil with the nozzle tip.
2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
3. Use a caulking gun and extrude the sealant with a single bead.
4. Tool the sealant bead with a clean and dry tool before the sealant skins for a smooth finishing.

#### 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. Place the nozzle into the caulking gun and screw tight.
4. Extrude the sealant with a single bead. Tool the sealant bead with a clean and dry tool before the sealant skins for a smooth finishing.



# VITAL TECHNICAL SDN. BHD.

## Technical Data Sheet

### VT-620 / VT-620S LM MS Sealant



Issuance date: 14/02/11

Revision date: 29/08/2025

Revision No.: 25-01

# VT-620

## LM MS Sealant

<b>CLEAN UP</b>	▪ Wet sealants can be cleaned up with acetone or mineral spirits. ▪ Cured sealants can only be removed mechanically.																							
<b>JOINT DESIGN</b>	▪ Joint dimension should be designed by taking into consideration the movement capability of the sealant and the anticipated joint movement ▪ Generally the joint width-to-depth ratio is 2:1 for joint width $\geq$ 12 mm, or 1:1 for joint width $<$ 12 mm ▪ Joint width: minimum = 6 mm, maximum = 35 mm * ▪ Joint depth: minimum = 6 mm, maximum = 12 mm																							
* Sealing joints with larger joint width is possible but sealant may sag in vertical applications.																								
<b>COVERAGE</b>	<table border="1"><thead><tr><th>Width</th><th>Depth</th><th>Coverage (290 ml) *</th><th>Coverage (600 ml) *</th></tr></thead><tbody><tr><td>6 mm</td><td>6 mm</td><td>7.32 meter</td><td>15.15 meter</td></tr><tr><td>10 mm</td><td>10 mm</td><td>2.64 meter</td><td>5.45 meter</td></tr><tr><td>20 mm</td><td>10 mm</td><td>1.32 meter</td><td>2.73 meter</td></tr><tr><td>25 mm</td><td>12 mm</td><td>0.88 meter</td><td>1.82 meter</td></tr></tbody></table>				Width	Depth	Coverage (290 ml) *	Coverage (600 ml) *	6 mm	6 mm	7.32 meter	15.15 meter	10 mm	10 mm	2.64 meter	5.45 meter	20 mm	10 mm	1.32 meter	2.73 meter	25 mm	12 mm	0.88 meter	1.82 meter
Width	Depth	Coverage (290 ml) *	Coverage (600 ml) *																					
6 mm	6 mm	7.32 meter	15.15 meter																					
10 mm	10 mm	2.64 meter	5.45 meter																					
20 mm	10 mm	1.32 meter	2.73 meter																					
25 mm	12 mm	0.88 meter	1.82 meter																					
* The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary. ▪ Calculation formula: $X / [(Y \times Z) \times 1.1] = Coverage$ $X = \text{volume of cartridge (or sausage) in ml},$ $Y = \text{joint width in cm}, Z = \text{joint depth in cm},$ $1.1 = 10\% \text{ wastage assumption},$ $Coverage = \text{linear meter run in cm per cartridge (or sausage)}$																								
<b>LIMITATIONS</b>	Not recommended for the following applications: ▪ Below waterline or permanent water immersion. ▪ Outdoor sealing/bonding adjacent to glass substrates. ▪ Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces. ▪ Overcoated with - Alkyd resin paint - cure inhibition to the paint - Chlorinated paint - staining issue - Oil based paint - not compatible																							
<b>CAUTION</b>	Contains aminosilane. May produce an allergic reaction. Harmful to aquatic life with long lasting effects. Keep out of reach of children. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.																							
<b>LEGAL NOTES</b>	Every endeavour has been made to ensure that the information given herein is true and reliable but it is given only for the guidance of our customers. The company cannot accept any responsibility for the loss or damage that may result from the use of the information, due to the possibility of variations of processing or working conditions and of workmanship outside our control. Users are advised to confirm suitability of this product by their own tests.																							

<b>LIMITED WARRANTY INFORMATION</b>	Vital Technical provides material warranty for a duration of 5 years if the product is used within its shelf life and in compliance with industrial standard application procedures. Vital Technical disclaims liability for any consequential or incidental loss or damages caused by incorrect usage. The material warranty only covers the replacement of the product without the other costs incurred, if the failure is proven to be directly related to the product within the warranty period. Material warranty will only be available once customer submits all the necessary documents and information, and an official material warranty letter is issued by Vital Technical. Any claim of warranty shall be made directly to Vital Technical in writing. Vital Technical shall hold no responsibility until site inspection by representatives of Vital Technical to confirm the alleged failure has been carried out.
-------------------------------------	--

(Scan to learn how to use)



Visit product page:  
<https://vitaltechnical.com/product/vt-620-lm-ms-sealant/>