

VITAL TECHNICAL SDN. BHD.

Technical Data Sheet

VT-626 / VT-626S Green Sealant



Revision No.: 22-02



Issuance date: 14/02/11 Revision date: 25/08/2022

VT-626 / VT-626S Green Sealant

Low Modulus One-Component MS Sealant





BASE

One-component MS Polymer

PHYSICAL STATE

Soft paste (before cure)

Elastic rubber (after cure)

STANDARD COLOURS

White Grey Black

TACK-FREE 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-626 Green Sealant is a low modulus 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.



Specially formulated to achieve superior performance and feature low VOC emission and content, VT-626 can comply with the stringent requirements of ASTM C920 as well as contributing to the Leadership in Energy and Environmental Design (LEED) v4.1 credit, and Cleanroom Suitable Material (CSM) qualification.

Unlike polyurethane sealants, VT-626 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

Maximum tensile strength : 1.1 N/mm²

Elongation at break : 600 %

Shore A hardness : 33

Movement capability : ±25 % ASTM C719

Low VOC compliant : Yes SCAQMD Rule 1168

VOC content : 17.91 g/L USEPA Method 24

ISO-ACCm Class : -7.1 (White Colour) ISO 16000

ISO-ACCm Class : -7.1 (White Colour)

FEATURES

- 25% Movement capability
- Certified Green Sealant
- APEO-, Formaldehyde- and Phthalate- free
- No outgassing
- Good UV resistance
- Paintable

Low static charge – Less dirt streaking

ASTM D 412

ASTM D 412

ASTM C661

- Silicone oil free Non-staining on adjacent substrates
- Isocyanate-free No air bubbling
- Solvent-free No shrinkage
- Primerless bonding to most surfaces

APPLICABLE TESTS / STANDARDS

VT-626 meets the requirements of:

- ASTM C920, Type S, Grade NS, Class 25, Use NT, M, A & G
- Singapore Green Building Product Labelling Scheme (SGBPLS)
- Cleanroom Suitable Material (CSM) ISO-ACC_m Class -7.1 (VT-626 White)
- Low VOC USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 24

APPLICATION

Suitable for Electronics Cleanroom applications (VT-626 White), sealing concrete joints (precast wall panels, expansion joints, control joints, FRC boards, etc.), window frame perimeter, etc. Other recommended applications include sealing of anodized aluminium, masonry, porcelain, coated metal, finished wood, epoxy and polyester panels, UPVC, polystyrene, and stainless steel.

PREPARATION

- Substrate surface must be dry and 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. Cut the cartridge tip carefully.
- 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



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CLEAN UP

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

JOINT DESIGN

- 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 ≥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.

COVERAGE

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 = volume of cartridge (or sausage) in ml,

Y = joint width in cm, Z = joint depth in cm,

1.1 = 10% wastage assumption,

Coverage = linear meter run in cm per cartridge (or sausage)

LIMITATIONS

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

CAUTION

Keep out of reach of children. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

LEGAL NOTES

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

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