



VITAL TECHNICAL SDN. BHD.
Technical Data Sheet
VT-629/ 629S
Fire Rated Hybrid Sealant



Issuance date: 28/07/2016

Revision date: 27/02/2026

Revision No.: 26-01

VT-629/ 629S Fire Rated Hybrid Sealant



MS Fire Rated Sealant

APPEARANCE

Non-sag thixotropic paste

STANDARD COLOR

(W10) White
(G10) Grey

TACK-FREE TIME

20 – 60 minutes
(at 25°C & 50% R.H.)

FULL CURE

7 days

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 around 25°C

APPLICATION TEMPERATURE

5 °C – 40 °C

SERVICE TEMPERATURE

-20 °C – 90 °C

DESCRIPTION



VT-629 Fire Rated Hybrid Sealant is a single-component, moisture-curing elastomeric joint sealant based on advanced MS Polymer technology that provides movement capability in fire rated joint applications. It is compliant with fire rating specification of BS EN 1366-4:2021. It can be painted over with common industrial paints; sealant bead will not shrink after cured; and the isocyanate-free formulation makes it possible to work on damp surfaces and will not have air bubbling issue. Even without primer, adhesion on various substrates is excellent. It is a green sealant formulated to meet the low VOC regulation.

TECHNICAL DATA

| | | |
|---|--------------------------------|------------|
| Curing System | : Moisture Curing | |
| Specific Gravity | : 1.62 g/mL | |
| Tensile Strength | : ≥ 1.0 N/mm ² | ASTM D 412 |
| Elongation at Break | : $\geq 200\%$ | ASTM D 412 |
| Movement Capability | : $\pm 25\%$ | ASTM C719 |
| Shore A Hardness | : ≥ 25 | ASTM C661 |
| Cure Depth (24 hours) at 23°C, 50% humidity | : Approx. 3mm | |

FEATURES

- 4 hours fire rating
- Bomba Fire Stop Certified
- ASTM C920 compliant
- $\pm 25\%$ movement capability
- Good UV resistance
- Low static charge – Less dirt streaking
- Paintable
- Isocyanate-free – No air bubbling
- Solvent-free – No shrinkage
- Primerless bonding to most surfaces
- Not containing any halogenated materials

APPLICATION

Recommended for sealing all building and construction joints and is used to provide fire protection to gap and movement joints. It is used for sealing interior and exterior movement joint where a fire rating of up to 4 hours is required in precast and in-situ concrete, expansion and construction joint, tilt-up construction, brick and blockwork, fibre cement board, plasterboard, underground tunnel, etc.

APPLICABLE TEST STANDARD

VT-629 meets the requirements of:

- RoHS I, RoHS II & SVHC
- BS EN 1366-4:2021 Fire resistance tests for service installations - Linear joint seals
- AS 1530.4:2014 Methods for fire tests on building materials, components and structures - Part 4: Fire-resistance test for elements of construction
- Low VOC – USEPA Method 24 under SCAQMD Rule 1168
- ASTM C920, Type S, Grade NS, Class 25, Use NT, A & M



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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.
 - 602 Primer is recommended especially 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. Puncture the internal aluminium foil inside with the nozzle.
3. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
4. Use a caulking gun and 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.

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.
5. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

LIMITATIONS

Not recommended for applications below waterline or permanent water immersion. Not for trafficable joints. Must limit the exposure to solvent, oil and other chemicals. Not paintable with alkyd resin paint because curing inhibition of the paint.

CAUTION

- Keep out of reach of children. Use in well ventilated areas.

LEGAL NOTES

Every endeavor 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 various processing or working conditions and of workmanship outside our control. Users are advised to confirm suitability of this product by their own tests.