



VITAL TECHNICAL SDN. BHD.

Technical Data Sheet

VT-219 Fire Rated Silicone Sealant



Issuance date: 31/07/17

Revision date: 12/02/2026

Revision No.: 26-01

VT-219/ VT-219S Fire Rated Silicone Sealant



100% Neutral Silicone Sealant

BASE

Silicone polymer

PHYSICAL STATE

Non-sagging paste
(Before cure)
Elastic rubber
(After cure)

STANDARD COLOURS

(G10) Matte Grey
(B10) Matte Black

TACK-FREE TIME

20 – 60 minutes
(at 25 °C & 50% R.H.)

PACKAGING

300 mL/cartridge
(24 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

-20 °C – 50 °C

SERVICE TEMPERATURE

Up to 150 °C

DESCRIPTION



VT-219 Fire Rated Silicone Sealant is a single-component, gun-grade, ready-to-use neutral silicone sealant formulated to form an elastomeric joint fire-retardant seal in construction applications. It helps control the spread of fire, smoke, and toxic fumes within a given area surrounded by firewalls for a period of up to four hours, depending on joint configuration.

TECHNICAL DATA

Curing system	: Moisture curing, neutral	
Specific gravity	: 1.28 g/mL	
Slump	: <1 mm	ASTM D2202
Ultimate tensile strength	: 1.4 N/mm ²	ASTM D412
Elongation at break	: 300 %	ASTM D412
Movement capability	: ±50 %	ASTM C719
Shore A hardness	: 33	ASTM C661
Low VOC compliance	: Yes	SCAQMD Rule 1168
VOC content	: 43.83 g/L	USEPA Method 24
	: 3.46%	USEPA Method 310

FEATURES

- Fire rating up to 4 hours
- ±50% movement capability
- Bomba Fire Stop Certified
- Not containing any halogenated material
- Excellent weather and UV resistance
- Excellent adhesion to most substrates
- Matte finish

APPLICABLE TEST / STANDARD

- VT-219 meets the requirements of:
- BS EN 1366-4:2006 Fire Resistance Tests
 - AS 1530.4:2014 Methods for Fire Tests on Building Materials
 - ASTM C920 and ASTM C719, Type S, Grade NS, Class 50, Use NT, A & G
 - Low VOC - USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 310
 - SIRIM Product Certification Licence PC013998 (ASTM C920:2018)

APPLICATION

- Recommended for firestop sealing of interior and exterior building and construction joints, where a fire rating of up to 4 hours is required. In addition, it may be used to seal vertical and horizontal joints between metals, masonry, concrete and other common construction materials.

PREPARATION

- Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.
- 602 Primer is recommended especially for porous substrates such as concrete for excellent adhesion.
- For sealant designs with depth of over 10 mm, use approved backing materials.

APPLICATION DIRECTION

1. Surfaces must be clean, dry and free of dirt, grease, oil or water.
2. Install backing material to control the depth of sealant bead in accordance with the fire rating that is required.
3. For a neat finish, apply masking tape and remove it before sealant skins over.
4. Cut nozzle at 45° angle to desired bead-width and apply sealant to substrate with cartridge gun.
5. Tooling time is 30 minutes, tack-free time is 60 minutes.

Caution:

DO NOT paste excess sealant onto the protective film of aluminium composite panel (ACP).

CLEAN UP

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



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- JOINT DESIGN**
- The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.
 - Generally calculation of the width sealant bead should be computed on the basis of a maximum $\pm 50\%$ movement capability
 - Minimum joint depth should not be less than 6 mm to accommodate movement.
 - Sealant design joint width-to-depth ratio should be 2:1.

COVERAGE

Width	Depth	Coverage (300 ml) *
6 mm	6 mm	7.58 meter
10 mm	10 mm	2.73 meter
20 mm	10 mm	1.36 meter
25 mm	12 mm	0.91 meter

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

- Calculation formula:

$$X / [(Y \times Z) \times 1.1] = \text{Coverage}$$

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 following applications:

- Structural glazing applications.
- Below waterline or permanent water immersion.
- Traffic areas subject to abrasion.
- Polycarbonate and polyacrylate, if under tension.
- Applications that requires the sealant to be painted.

CAUTION

Product releases methylethylketoxime during application and curing. Contains aminosilane. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects. Avoid breathing dust, fume, gas, mist, spray, vapours. Wash hands, forearms and face thoroughly after handling. Do not touch eyes. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Take off contaminated clothing and wash it before reuse. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

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 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.