



# VITAL TECHNICAL SDN. BHD.

## Technical Data Sheet

### VT-228 Fire Retardant Sealant



Issuance date: 31/03/2018

Revision date: 12/02/2026

Revision No.: 26-01

# VT-228 Fire Retardant Sealant

## Fire Rated Water-based Acrylic Gap Sealant



### Base

Acrylic emulsion

### PHYSICAL STATE

Soft paste

### WORKING TIME

<10 minutes  
(at 25 °C & 50% R.H.)

### STANDARD COLOURS

(W10) White  
(G10) Grey  
(R10) Red

### PACKAGING

450 g/ cartridge  
(24 cartridges/ carton)  
900 g/ sausages  
(20 sausages/ carton)  
15 kg/ pail

### SHELF LIFE

24 months

### STORAGE

Store in a dry and cool place with temperature below 30 °C.  
(Do not store below 5 °C)

### APPLICATION TEMPERATURE

5 °C – 40 °C

### SERVICE TEMPERATURE

-10 °C – 75 °C

### DESCRIPTION



VT-228 Fire Retardant Sealant is a water-based acrylic firestop gap sealant designed for fire-rated joint applications, providing reliable movement capability. It offers a four-hour fire rating under BS EN 1366-4:2006, ensuring superior fire protection performance. Almost odourless and non-corrosive to metals, it forms a tough, elastic seal after drying.

VT-228 meets low VOC requirements and delivers good primer-less adhesion on most substrates. It meets ASTM C920 Standard Specification for Elastomeric Joint Sealants, making it suitable for joints where flexibility and durability are critical.

TECHNICAL DATA	Property	Value	Standard
Curing system		: Water evaporation	
Density		: 1.46 g/mL	
Solid content		: 80 %	
Ultimate tensile		: 0.5 N/mm <sup>2</sup>	ASTM D412
Elongation		: 100%	ASTM D412
Movement capability		: ±25%	ASTM C 719
Shore A hardness		: 25	ASTM C661
Low VOC compliance		: Yes	SCAQMD Rule 1168
VOC content		: 3.96 g/L	USEPA Method 24

- FEATURES**
- 4-hour fire rating
  - ±25% Movement capability
  - Bomba Fire Stop Certified
  - Smoke, fume, and water resistant
  - Easy clean up
  - Not containing any halogenated material

- APPLICABLE TEST / STANDARD**
- VT-228 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, Type S, Grade NS, Class 25, Use NT, M & A
  - Low VOC - USEPA Method 24 under SCAQMD Rule 1168
  - SIRIM Product Certification Licence PC013998 (ASTM C920:2018)

**APPLICATION** Indoor joints with fire retardant requirements (wall and ceiling joints, perimeter sealing of fire rated doors and windows). It has good adhesion on most construction materials (concrete, bricks, painted wood, aluminum, etc.).

- PREPARATION**
- Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.
  - For a neat finishing, use masking tape and remove it within the working time.
  - 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. Surfaces should be cleaned with alcohol, M.E.K. or other suitable solvent. Do not use soap or detergent.
  3. For a neat finish, apply masking tape and remove it before sealant skins over.
  4. Cut nozzle at 45° angle to desire bead-width and apply to substrate with cartridge gun.
  5. Tool the sealant within 10 minutes of extrusion before it skins.
  6. Allow to dry for one hour before applying water-based paint and 24 hours for oil-based paint.
  7. Uncured sealant can be cleaned up with damp cloth.

- CLEAN UP**
- Wet sealants can be cleaned up with water.
  - Cured sealants can only be removed mechanically.



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## Fire Retardant Sealant

- 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.
  - Minimum bead size should not be less than 6 mm.
  - Sealant design joint width-to-depth ratio should be 2:1.

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- LIMITATIONS**
- Not recommended for continuous water immersion.
  - Not for PE, PP, Teflon, copper and bituminous surfaces.
  - Painting over with highly filled emulsion paints can cause cracks in paint film.

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**CAUTION** Keep out of reach of children. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

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**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.