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| **Revision Date** | 10/11/20 |
| **Revision No.** | 20-02 |

# Technical Data Sheet
## AS-202
## Fire Retardant Silicone Sealant

### Physical Properties

**Base:**
Silicone polymer

**Appearance:**
Non-sagging paste
(Before curing)

Elastic rubber
(After cured)

**Colours:**
Matte grey
Matte black

**Tack-free time:**
60 – 90 minutes
(at 25 °C & 50% R.H)

**Application temperature:**
-20 °C to 50 °C

**Service temperature:**
Up to 150 °C

**Storage:**
Store in a dry and cool place with temperature below 30 °C.

**Shelf life:**
12 months

**Packaging:**

| Content | Quantity/ carton |
|---|---|
| 300 mL cartridge | 24 |

### Description

ALSEAL Fire Rated Silicone Sealant is a single-component, gun-grade, ready-to-use neutral silicone sealant formulated to form an elastomeric 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.

### Features

- Fire rating up to 4 hours
- ±50% movement capability
- Excellent weather and UV resistance
- Excellent adhesion to most substrates
- Matte finish

### Applications

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

### Technical Data

| | |
|---|---|
| Curing system | : Moisture curing, neutral |
| Specific gravity | : 1.28 g/mL |
| Slump (ASTM D2202) | : <1 mm |
| Maximum tensile strength (ASTM D412) | : 1.4 N/mm² |
| Elongation at break (ASTM D412) | : 300 % |
| Movement capability (ASTM C719) | : ±50 % |
| Shore A hardness (ASTM C661) | : 33 |
| VOC content (USEPA Method 24) | : 43.83 g/L |
| (USEPA Method 310) | : 3.46% |

### Approvals/ Specifications

AS-202 meets the requirements of the following specifications:

- BS EN 1366-4:2006 Fire Resistance Tests
- AS 1530.4:2014 Methods for Fire Tests on Building Materials
- ASTM C920 & ASTM C719, Type S, Grade NS, Class 50, Use NT, A
- Low VOC - USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 310

### Usage Instructions

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 20 minutes, tack-free time is 30 minutes.

**Alseal Marketing Sdn Bhd**

www.alsealmarketing.com

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# Fire Retardant Silicone Sealant

## Clean Up

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

## 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 ±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** x **Z**) x 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

## Limitation

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. Avoid breathing vapours. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. IF ON SKIN: Wash with soap and water. If skin irritation or a rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Keep out of reach of children. Use in well ventilated areas. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

## Disclaimer

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