

Premium MS Polymer

**ALSEAL**<sup>®</sup>

AS-4002 / AS-4002S

# Premier Construction Sealant

## Features:

- Excellent weatherability – 10-year warranty
- ASTM C920 (Class 50) compliant
- Paintable
- Low static charge – Less fluid-streaking
- No silicone oil – Non-staining on adjacent substrates
- No isocyanate – No blistering
- No solvent – No shrinkage
- Bonds most substrates without primer
- Matte finish

## Product Specifications:

Curing system	: Moisture curing
Density	: 1.52 - 1.54 g/ml
Tack-free time	: 30 - 60 minutes
Tensile strength (ASTM D412)	: >0.7 N/mm <sup>2</sup>
Elongation at break (ASTM D412)	: >600 %
Movement capability (ASTM C719)	: ±50 %
Shore A hardness (ASTM C661)	: 25 - 30
VOC content (USEPA Method 24)	: <50 g/L
Application temperature	: 5 °C - 40 °C
Service temperature	: -30 °C - 100 °C
Shelf life	: 9 months (cartridge) : 12 months (sausage)



(Scan and learn more)



**Description:** A one-component, elastomeric joint sealant formulated with acrylic modified hybrid sealant, the premium grade of MS Polymer. The weatherability and UV resistance of the sealant is excellent, with much longer expected service life than other organic sealants in the market. The finishing is matte, less tacky, and with low electrostatic charge, thereby reducing fluid-streaking issues on façade cladding caused by air-borne dust particles. Besides, the formula is free of silicone oil, minimizing oil-staining or other building aesthetic issues caused by migration of silicone oil. Unlike polyurethane sealants, this sealant is free of isocyanate and solvent and thus no issues like blistering or shrinkage will occur. It also can adhere well to numerous substrates without primer, fast-curing, paintable with common water-based coatings, and it is a green product that complies with SCAQMD rule #1168 Low VOC limit.

**Applications:** Specially formulated to seal metal (e.g. ACP) and stone (e.g. marble) façade cladding due to its excellent weatherability and non-staining/less fluid-streaking characteristics. It is also recommended for sealing concrete joints like precast wall panel joints construction joints, control joints, expansion joints, and window frame perimeter sealing (PVC / Aluminum to concrete wall), both painted and non-painted surfaces. Other recommended applications include sealing of masonry, brickworks, anodized aluminum, stainless steel, porcelain, finished wood, coated metal, epoxy and polyester panels, uPVC, polystyrene, and many difficult substrates.

**Limitation:** Not recommended for constant water immersion, outdoor glass sealing, sealing substrates such as PE, PP, Teflon, Neoprene, and bitumen. Not paintable with alkyd paints.

**Available colors:** Matte black, matte grey & matte white  
**Content:** 290 ml (cartridge), 600 ml (sausage)  
**Carton quantity:** 20 cartridges / carton, 20 sausages / carton

## Applications:



• Aluminium Composite Panel Façade



• Solid Panel Metal Cladding



• Natural Stone Façade

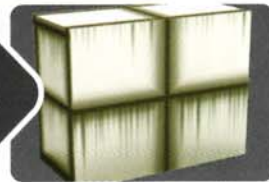


• Concrete Joint

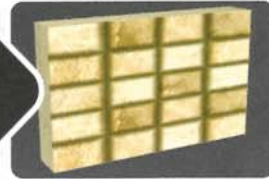
## Features:

### Known issues with other silicone / PU sealants

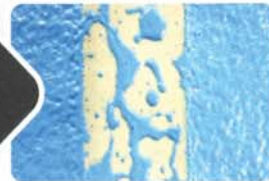
Fluid-streaking on façade cladding (Silicone)



Staining on natural stone façade (Silicone)



Not paintable (Silicone)



Sealant cracks over time (PU)



Blistering issue (PU)



Shrinkage after cure (PU)



### Problems solved with AS-4002

✓ Less fluid-streaking on façade cladding (Low static charge)



✓ Non-staining on natural stone façade (No silicone oil)



✓ Paintable (MS)



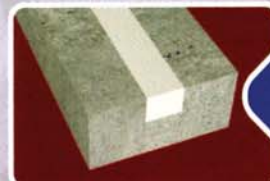
✓ No cracking (Excellent UV resistance)



✓ No blistering (No isocyanate)



✓ No shrinkage (No solvent)



Manufactured under ISO9001 & ISO14001 Management Systems

Distributed by:



Issuance Date 27/05/15  
 Revision Date 06/09/19  
 Revision No. 19-03

# Technical Data Sheet

## AS-4002 / AS-4002S Premier Construction Sealant



### Physical Properties

**Appearance:**  
Soft paste

**Colours:**  
Matte black, matte grey & matte white

**Tack-free / Skin-form time:**  
20 – 40 minutes

**Application temperature:**  
5 °C to 40 °C

**Service temperature:**  
-20 °C to 90 °C

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

**Shelf life:**  
9 months (cartridge)  
12 months (sausage)

**Packaging:**

Content	Quantity/ carton
290 mL cartridges	20
600 mL sausages	20



Scan and learn

Visit product page:  
<https://www.alsealmarketing.com/as-4002-premier-construction-sealant/>

**Alseal Marketing Sdn Bhd**

[www.alsealmarketing.com](http://www.alsealmarketing.com)

### Description

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### Features

- ◆ Excellent weatherability – 10-year warranty
- ◆ ASTM C920 (Class 50) compliant
- ◆ Paintable
- ◆ No silicone oil – Non-staining on adjacent substrates
- ◆ Low static charge – Less dirt streaking
- ◆ No isocyanate – No blistering
- ◆ No solvent – No shrinkage
- ◆ Bonds most substrates without primer
- ◆ Matte finish

### Applications

Specially formulated to seal metal (e.g. ACP) and stone (e.g. marble) façade cladding due to its excellent weatherability and non-staining/ less dirt-streaking characteristics. It is also recommended for sealing concrete joints like precast wall panel joints construction joints, control joints, expansion joints, and window frame perimeter sealing (PVC / Aluminum to concrete wall), both painted and non-painted surfaces. Other recommended applications include sealing of masonry, brickworks, anodized aluminum, stainless steel, porcelain, finished wood, coated metal, epoxy and polyester panels, uPVC, polystyrene, and many difficult substrates.

### Technical Data

Curing system	: Moisture curing
Density	: 1.53 g/mL
Maximum tensile at break (ASTM D412)	: 1.0 N/mm <sup>2</sup>
Elongation (ASTM D412)	: 530 %
Shore A hardness (ASTM C661)	: 27
Joint movement capability (ASTM C719)	: ±50 %
VOC content (USEPA Test Method 24)	: 46.61 g/L

### Usage Instructions

1. Surfaces must be clean, dry and free of dirt, grease, oil or water.
2. For a neat finish, apply masking tape and remove it before sealant skins over.
3. 602 Primer is recommended for porous substrates such as natural stone for excellent adhesion.
4. Cut the tip off and puncture the internal foil seal with the nozzle. Cut the nozzle at 45° angle to desired bead-width and apply the sealant to substrate with a cartridge gun.
5. Tool the sealant before it skins.
6. Uncured sealant can be cleaned up with mineral spirits.
7. Use approved backing material for joints over 10 mm deep.



## AS-4002 Premier Construction Sealant

### 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  $\geq 12$  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.

### Caution

Toxic to aquatic life with long lasting effect. Avoid release to the environment. Collect spillage. Keep out of reach of children. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request.

### Disclaimer

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.