Issuance Date	02/11/20
Revision Date	09/02/2026
Revision No.	26-02

Technical Data Sheet

AS-4004 / AS-4004S
MS Joint Sealant

Physical Properties

Appearance:
Non-sagging paste
(before cure)

Elastic rubber
(after cure)

Standard Colours:
(B10) Black
(G10) Grey
(W10) White

Skin-form time:
20 – 60 minutes

Application temperature:
5 °C to 40 °C

Service temperature:
-30 °C to 90 °C

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

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

Packaging:

Content	Quantity/ carton
290 mL cartridge	20
600 mL sausage	20

Description

ALSEAL MS Joint Sealant is a single-component, elastomeric, and fast-curing joint sealant formulated based on advanced MS Polymer technology. It is a low-modulus sealant with ±25% movement capability, recommended for use as part of a waterproofing system, such as sealing wall-to-wall or wall-to-floor fillet joints. Besides, it is also suitable for sealing perimeter gaps of door and window systems.

Features

- Permanently flexible
- Excellent workability
- ±25 % Movement capability
- Better weathering resistance than PU sealants
- Paintable
- Low static charge – Less dirt streaking
- No silicone oil – Non-staining on adjacent substrates
- No isocyanate – No blistering
- No solvent – No shrinkage & non-corrosive
- Bond most substrates without primer

Applications

Recommended for sealing of concrete fillet joints, precast wall panel joints, expansion joints, control joints, connection joints, etc. It is also ideal for window frame perimeter sealing especially when the sealant needs to be painted. Other recommended applications include sealing of GRC panel systems, anodized aluminium, masonry, porcelain, coated metal, finished wood, epoxy and polyester panels, UPVC, polystyrene, and stainless steel.

Technical Data

Curing system	: Moisture curing
Density	: 1.65 g/mL
Ultimate tensile at break (ASTM D412)	: 1.1 N/mm²
Elongation (ASTM D412)	: 600 %
Shore A hardness (ASTM C661)	: 30
Joint movement capability (ASTM C719)	: ±25 %
Slump (ASTM D2202)	: < 1mm
VOC content (USEPA Test Method 24)	: 15.55 g/L
Cure depth (24 hours) at 23° C, 50% humidity	: Approx. 4 mm

Approvals/ Specifications

AS-4004 meets the requirements of the following specifications:

- ASTM C920, Type S, Grade NS, Class 25, Use NT, M & A
- Low VOC - USEPA Method 24 under SCAQMD Rule 1168
- Good Environmental Choice Australia (GECA) certified

Usage Instructions

1. Surfaces must be clean, free of dirt, grease, oil or standing 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 finishing, apply masking tape and remove it before sealant skins over.
4. 602 Primer is recommended for porous substrates such as concrete for excellent adhesion.
5. 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.
6. Tool the sealant before it skins.
7. Uncured sealant can be cleaned up with mineral spirits.
8. Use approved backing material for joints over 10 mm deep.

Alseal Marketing Sdn Bhd

www.alsealmarketing.com

AS-4004
MS Joint 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 ≥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.

Coverage

Width	Depth	Coverage (290 ml) *	Coverage (600 ml) *
6 mm	6 mm	7.32 meter	15.15 meter
10 mm	10 mm	2.64 meter	5.45 meter
20 mm	10 mm	1.32 meter	2.73 meter
25 mm	12 mm	0.88 meter	1.82 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 the following applications:

- Below waterline or permanent water immersion.
- Outdoor sealing/bonding adjacent to glass substrates.
- Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces.
- Overcoated with
  - Alkyd resin paint - cure inhibition to the paint
  - Chlorinated paint - staining issue
  - Oil based paint - not compatible

Caution

Keep out of reach of children. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

Warranty Information

Alseal Marketing provides material warranty for a duration of 5 years if the product is used within its shelf life and in compliance with industrial standard application procedures*. We disclaims liability for any consequential or incidental loss or damages caused by incorrect usage. The material warranty only covers the replacement of the product without the other costs incurred, if the failure is proven to be directly related to the product within the warranty period. Material warranty will only be available once customer submits all the necessary documents and information, and an official material warranty letter is issued by Alseal Marketing. Any claim of warranty shall be made directly to Alseal Marketing in writing. Alseal Marketing shall hold no responsibility until site inspection by representatives of Alseal Marketing to confirm the alleged failure has been carried out.

* In compliance with ASTM C1193-16 Standard Guide for Use of Joint Sealants, with minimum sealant thickness of 6 mm (movement joint).

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.

Alseal Marketing Sdn Bhd

www.alsealmarketing.com