

# Technical Data Sheet

## AS-205

### High Performance Silicone Sealant



#### Physical Properties

**Base:**

Silicone polymer

**Appearance:**

Non-sagging paste  
(Before curing)

Elastic rubber  
(After cured)

**Colours:**

Translucent, white, grey & black

**Tack-free time:**

10 – 30 minutes  
(at 25 °C & 50% R.H)

**Application temperature:**

-20 °C to 50 °C

**Service temperature:**

-40 °C 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
600 g sausage	20

#### Description

ALSEAL High Performance Silicone Sealant is a one-component, high performance, 100% neutral cure silicone sealant formulated to give superior adhesion and durability in a wide range of glazing, weather sealing and trade applications. It complies with the FDA testing method intended for direct food contact. It has excellent resistance to weathering, UV radiation, vibration, moisture, ozone, temperature extremes, airborne pollutants, and many cleaning detergents and solvents.

#### Features

- ◆ 100% neutral silicone
- ◆ ASTM C920 (Class 50) compliant
- ◆ Safe for Food Contact  
(FDA 21 CFR Part 175.300 compliant)
- ◆ Excellent weathering resistance
- ◆ Permanently flexible
- ◆ Indoor and outdoor use

#### Applications

- ◆ Well-suited for sealing metal lap joints in roofing, guttering and cladding applications.
- ◆ It will bond to form a strong weatherproof seal on most common building materials such as aluminium, galvanized and zinc-coated steel, painted surfaces, glass, brick, concrete and mirror bonding.

#### Technical Data

Curing system	: Moisture curing, neutral
Density	: 1.02 g/mL
Slump (ASTM D2202)	: <1 mm
Maximum tensile strength (ASTM D412)	: 1.3 N/mm <sup>2</sup>
Elongation (ASTM D412)	: 370 %
Movement capability (ASTM C719)	: ±50 %
Shore A hardness (ASTM C661)	: 25
VOC content (USEPA Method 24)	: 43.68 g/L

#### Usage Instructions

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 desired bead-width and apply to substrate with cartridge gun.
5. Tool the sealant within 5 minutes of extrusion before it skins. Tack-free in 15 minutes.
6. Uncured sealant can be cleaned up with mineral spirits.

#### 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 ±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 (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 lineal 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 = lineal 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.
- ◆ Neoprene rubber.

**Caution**

Product releases methylethylketoxime during application and curing. 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. 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.

**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.