Windmill GP A168 Silicone Sealant



Acetoxy Silicone Sealant

BASE

Silicone polymer

PHYSICAL STATE

Soft Paste (Before cure) Elastic rubber (After cure)

COLOURS

Clear White Black Grey Aluminium Bronze

TACK-FREE TIME

10 – 30 minutes (at 25 °C & 50% R.H.)

PACKAGING

270 mL/cartridge (24 cartridges/carton)

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SHELF LIFE

12 months

STORAGE

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

APPLICATION TEMPERATURE

-20 °C - 50 °C

SERVICE TEMPERATURE

Up to 150 °C

DESCRIPTION

Windmill GP A168 Silicone is a general acetoxy silicone sealant formulated for various sealing applications like glazing, where long term reliability is required. It will bond to form a durable, flexible, and waterproof seal on many common wet area building materials. This elastomeric sealant is permanently elastic after curing.

TECHNICAL DATA

Curing system : Moisture curing, acetoxy
Specific gravity : 0.95 – 0.98 g/mL

Tensile strength : >0.5 N/mm² ASTM D412 Elongation at Break : >350 % ASTM D412 : ±25 % Movement capability ASTM C719 ASTM C661 Shore A hardness : 10 - 20VOC content : 98.51 g/L USEPA method 24 Low VOC compliance SCAQMD Rule 1168 : Yes

FEATURES

- Versatile sealant
- ±25 % movement capability
- Low VOC compliant

- Permanently flexible
- Excellent durability
- Indoor and outdoor use

APPLICABLE TESTS / STANDARDS

GP A168 meets the requirements of:

- ASTM C920, Type S, Grade NS, Class 25, Use NT, A & G
 Low VOC USEPA Method 24 under SCAQMD Rule 1168
- RoHS I & RoHS II

APPLICATION

 Well-suited for general sealing applications such as skylights, ventilators, air-conditioning systems, plastic signs, glass block structures and as a bedding for marine hardware.

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 within the working time.
- For sealant designs with depth of over 10 mm, use approved backing materials.

APPLICATION DIRECTION

- 1. Cut the cartridge tip carefully.
- 2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
- 3. Use a caulking gun and extrude the sealant with a single bead.
- 4. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

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 ±25 % 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.

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COVERAGE

Width	Depth	Coverage (280 ml) *
6 mm	6 mm	7.07 meter
10 mm	10 mm	2.55 meter
20 mm	10 mm	1.27 meter
25 mm	12 mm	0.85 meter

- * The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.
- Calculation formula:

$X / [(Y \times Z) \times 1.1] = Coverage$

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 (or sausage)

LIMITATIONS

Not recommended for following applications:

- Substrates that could be corroded by acetic acid released as the sealant cures.
- Copper or any alloys containing copper.
- Polyethylene, polypropylene, and polytetrafluoroethylene (Teflon)
- Traffic areas subject to abrasion.
- Structural glazing.
- Substrates such as concrete, marble, quartzite, or natural stone.
- Neoprene rubber.

CAUTION

Product releases acetic acid during application and curing. 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.

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.