productos pennsylvania

pens® silicone 100% architectural degree

acetic

Technical Data Sheet

pens® silicone 100% architectural degree is a single component 100% silicone sealant that cures in contact with humidity of the environment producing a durable and highly resistant silicone rubber. Developed for glass/aluminum industry for integral or structural residential facades.

Product Data

PROPERTIES	VALUE	TEST METHOD
Chemical base	Acetic Silicone	
Aspect	Soft Paste	
Skin over time	10-15 minutes (77 °F and 50% HR)	ASTM C-679-15
Curing Rate	1.6-2 mm/day (77 °F and 50% HR)	ASTM D-1640-14
Density	1.01-1.02 g/ml	ASTM-D1475-13
Application temperature	-22 °F to 122 °F	
Service Temperature	-76 °F to 428 °F	
Elongation	Aprox. 499%	ASTM-D-412-16
Tensile Strength	Aprox. 263.13 lbf/in^2	ASTM-D-412-16
Shore A Hardness	20-25	ASTM- C-661-15
Movement Capability	±25%	ASTM-C-719-14(19)
U.V. Resistance	Excellent	ASTM-G-154-16

Information obtained from laboratory tests.

Uses

pens® silicone 100% architectural degree has been designed for:

- Ideal as weather sealant in integral and structural facades.
- Elastic, airtight, weatherproof, and lasting seals or bonding between smooth materials.
- Seals between aluminum and glass, stainless steel, ceramic, porcelain sheets and tiles.
- Seals of greenhouse, glass skylights, electronic equipments and showcases.

Advantages

- Comply standard ASTM C-920.
- Easy application and fast film formation.
- Excellent movement capacity.
- Offer excellent adhesion to smooth surfaces like aluminum.
- Low VOC (Volatile Organic compounds) level.

Application

The surfaces to be sealed shall be firm, dry, clean free of dust, grease, oil and water and old sealant. The cleaning of smooth surfaces (like glass, metal, etc.) shall be done with two cleaning clothes, consisting in passing a (lint free) cleaning clothe impregnated with isopropyl alcohol, and removing immediately all the impurities with a clean and dry cleaning clothe. Place a masking on the surfaces to limit the area to be sealed. Introduce ***pens® silicone 100% architectural degree*** in the caulking gun. Cut the upper part of the cartridge, then place the pipette, cut at 45° calculating the width of the joint to be sealed. Pull the trigger of the gun to press the piston and the product will flow on the joint. Apply the sealant in a cord form on the surface to be sealed. It shall be left a minimum section of 6 x 6 mm and maximum 25 mm. Finally pass again with a curved spatula in opposite direction to the application, so the product penetrates in the joint, and get a better adhesion and break the air bubbles that could be trapped during the application. Once performed this, remove the masking tape in opposite direction to the application in a continuous but controlled movement. The excess could be removed before curing with a cloth dampened in isopropyl alcohol.

pens® silicone 100% architectural degree **18-07-2023** (replaces all previous ones) **SIA-05** acetic

Technical Support: *800 90 210 00*
soporte.tecnico@pennsylvania.com.mx

*the **caulking expert***

pens® silicone 100% architectural degree

acetic

Technical Data Sheet

Recommendations

- Perform tests under actual application conditions to guarantee its proper operation.
- Do not apply in wet surfaces o materials in curing process.
- To form a proper joint of the sealant and prevent the adhesion to a third surface, it is recommended to be used as a support for polyolefin cylindric extrusion ***SOF Rod*** or polyethylene ***HBR*** (see technical sheet).
- The ratio between width and depth for joints of 6 mm and up to 10 mm width will be 1 to 1 (width = depth) and in joints larger than 10 mm and up to 25 mm, it will be of 2 to 1 (depth = width/2).
- It is important to consider that the silicones are not developed to be in constant water immersion, because they will have a smaller lifetime.

Maintenance

- It does not require any maintenance, however.
- If the seal is damaged, replace the damaged section, cleaning the surface before applying the new seal.

Precautions

- The sealant shall not be applied in completely close area, due it is required relative humidity for vulcanization.
- The non-cured product could cause eyes and skin irritation with prolonged contact. In case of discomfort, wash thoroughly with water for 15 minutes and seek medical advice immediately.
- Keep out of the reach of children.

Limitations

- Do not use in butt joints with specialty glasses.
- Do not use in contact with the silver of the mirrors.
- In fish tanks seals.
- As structural seal.

Presentation

Packaging and Colors

- Aluminum
- White
- Bronze
- Black
- Transparent

Coverage

A cartridge yields 7.23 m, in joints of 6 x 6 mm, considering 7% waste.

Shelf Life

18 months kept in a fresh and dry storage, in its original packaging at a 21 °C (70 °F) temperature and 50% of atmospheric moisture.

Technical Support

Productos Pennsylvania's Technical Support is at your service, assisting you with:

Guidance in how to apply this or any of our products.

Blueprint reviews.

Joint dimension calculus.

Compatibility and adhesion testing of our sealants with different materials.

NOTE:

Productos Pennsylvania S.A de C.V. *provides technical assistance when required. Please contact our Technical Department regarding use and application of this product. It is the user's responsibility to test the product and its uses before application.*

Productos Pennsylvania, S.A. de C.V.
Camino a San José 1, Fracc. San Pablo Tecnológico, C.P. 76150, Querétaro, Qro. México

Date of production: ***March 2023***

the ***caulking expert***