PURSIL™

TECHNICAL DATA SHEET

Product name : **Silicone Sealant PURSIL-S**

I. PRODUCT OVERVIEW

1. Product name: Silicone Sealant PURSIL-S

2. Product type: One-component neutral / acidic silicone sealant.

This silicone sealant is a single-component product. It cures by absorbing moisture in the air and forms a sealing layer with good elasticity and adhesiveness, suitable for various sealing scenarios in the construction field.

3. Main applications:

Door and window sealing: Fills the gaps between door and window frames and walls, providing waterproofing, windproofing, sound insulation and heat insulation.

Building joint sealing: Such as expansion joints, settlement joints, etc., adapting to the displacement and deformation of the building structure.

Curtain wall sealing: Used for sealing between panels of glass, stone and metal curtain walls, effectively preventing the penetration of rainwater and air.

Bathtub sealing: Seals joints around bathtubs, sinks and other sanitary fixtures, preventing water seepage.

II. PRODUCT FEATURES

1. Excellent weather resistance: It withstands natural environmental factors such as ultraviolet rays, ozone, wind and rain, and maintains stable performance during long-term use.

2. Excellent adhesiveness: It has strong adhesion to a variety of building materials such as glass, metal, stone, concrete and ceramics.

3. High elasticity and displacement capacity: It adapts to displacement of the building structure caused by temperature changes, earthquakes and wind force, while maintaining sealing performance.

III. APPLICATION GUIDELINES

1. Surface treatment: Ensure the bonded surface is clean, dry and free of oil stains, dust, moisture and other impurities before construction. Metal surfaces must be degreased and derusted; glass surfaces can be wiped with alcohol; concrete and stone surfaces should be smooth and, if necessary, polished.

2. Sealant application: The one-component product can be loaded directly into the sealant gun and extruded evenly by squeezing the gun. Apply with a sealant gun or dedicated equipment, keeping the sealant layer continuous and uniform, and avoiding bubbles and voids.

3. Joint dimensions: Determine the width and depth of the joint according to the actual application and the displacement capacity of the sealant. Generally, the joint width is not less than 6 mm, and the depth is 0.5 – 1 times the width.

4. Trimming and curing: After applying, use a tool such as a scraper to smooth the sealant surface and remove excess sealant. The sealant cures at room temperature (23 ± 2 °C, humidity 50 ± 5 %). Surface drying time is about 0.5 hours, and complete curing usually takes 24 hours to 72 hours for optimum use. Avoid applying external force to the sealant layer during curing.

IV. TECHNICAL PARAMETERS

No.	Inspection items	Unit	Index	Inspection results	Evaluation
1	Appearance	—	Smooth, uniform paste, free from bubbles, lumps, gels, or skins, and without easily undispersed precipitates.	Smooth, uniform paste, free from bubbles, lumps, gels, or skins, and without easily undispersed precipitates.	Qualified
2	Droop — Vertically placed	mm	≤ 3	0	Qualified
	Droop — Horizontally placed	—	Non-deformation	Non-deformation	Qualified
3	Extrudability	s	≤ 10	1.7	Qualified
4	Surface drying time	h	≤ 3	0.6	Qualified
5	Hardness, Shore A	—	20 ~ 60	40	Qualified
6	Thermal ageing — Thermal weight loss	%	≤ 10	5.0	Qualified
	Thermal ageing — Crack	—	No	No	Qualified
	Thermal ageing — Pulverization	—	No	No	Qualified
7	Tensile adhesion, 23 °C — Tensile adhesive strength	MPa	≥ 0.60	1.17	Qualified
	Tensile adhesion, 23 °C — Bonding failure area	%	≤ 5	2	Qualified
	Tensile adhesion, 23 °C — Elongation at maximum tensile strength	%	≥ 100	398	Qualified
	Tensile adhesion, 23 °C — Modulus at 20% elongation rate	MPa	—	0.22	/
	Tensile adhesion, 23 °C — Modulus at 20% elongation rate	MPa	—	0.33	/
	Tensile adhesion, 23 °C — Modulus at 20% elongation rate	MPa	—	0.46	/
	Tensile adhesion, 90 °C — Tensile adhesive strength	MPa	≥ 0.45	0.80	Qualified
	Tensile adhesion, 90 °C — Bonding failure area	%	≤ 5	2	Qualified
	Tensile adhesion, −30 °C — Adhesive strength	MPa	≥ 0.45	1.48	Qualified
	Tensile adhesion, −30 °C — Bonding failure area	%	≤ 5	4	Qualified
	Tensile adhesion, after water immersion — Tensile adhesive strength	MPa	≥ 0.45	1.11	Qualified
	Tensile adhesion, after water immersion — Bonding failure area	%	≤ 5	5	Qualified

V. PRECAUTIONS

1. Storage conditions: Store in a dry, cool and well-ventilated environment, away from direct sunlight and high temperatures. Storage temperature is preferably 5 – 27 °C, and shelf life is 9 – 12 months from the date of production.

2. Avoid contact: During construction, avoid contact with the eyes and skin. If accidental contact occurs, immediately rinse with plenty of water and seek medical attention promptly.

3. Environmental protection: Pay attention to environmental protection during use; properly handle remaining sealant and packaging materials, and avoid environmental pollution.

VI. PACKAGING SPECIFICATIONS

1. Packaging form: Packaged in plastic cartridges or sausage packaging.

2. Packaging capacity: cartridge: 300 ml. Sausage: 590 ml.

VII. DECLARATION

The data in this technical data sheet are typical values obtained under standard test conditions. Actual results may differ due to environmental conditions and construction methods. This data is for reference only and shall not be used as the sole standard for product acceptance. Customers should conduct sufficient testing before use to ensure the product meets their actual needs.

— End of Technical Data Sheet —