

Penguin Seal 2550LM

One-component Modified Silicone-Based Sealant

Low Modulus Type



Penguin Seal 2550LM is a moisture-curing, one-component modified silicone-based sealant. This sealant is of the low-modulus type, with elastic properties. Penguin Seal stretches following the substrate's movements, and adheres to any material. Paint can also be applied to the sealant. <Penguin Seal 2550LM> is an elastic sealing material suitable for application to joints of siding material and ALC plates.



Excellent weather- and heat-resistance properties and fading

Minimal curing shrinkage

Excellent non-staining properties, suitable for use on stone, tile, and mortar.

Applications

- Sealing joints of siding material
- Sealing joints of ALC plates
- Sealing various roofing materials such as polyvinyl chloride-lined steel plate and colored galvanized plate
- Sealing joints of PC plates and RC structures

Features

Flexible and elastic

Internal stress is low due to its lower modulus.

This sealant is suitable for joints of materials such as siding material with high stretch characteristics, or ALC plates with low surface strength.

Excellent workability at low temperatures

Less temperature-dependent and has stable workability at a wide range of temperatures. Provides smooth extrusion at low temperatures, which results in good workability.

Easy to paint

High paint adhesion. Almost all types of paint and lysin can be applied.

For any material

Using primer US-1 or UM-2 gives 2550LM excellent adhesion in various materials.

General properties

| Item | | Result | | | | | | | |
|--|-----------------------|-----------------------|-------------|---|---|--------------------------------|-----------|-----------|-----|
| Class | | F-12.5P | | | | | | | |
| Durability category by JIS A 5758 | | 8020 equivalent | | | | | | | |
| Slump (mm) | Vertical | 50°C | 0 | | | | | | |
| | | 5°C | 0 | | | | | | |
| | Horizontal | 50°C | 0 | | | | | | |
| | | 5°C | 0 | | | | | | |
| Elasticity recovery rate (%) | | 39 | | | | | | | |
| Volume change (%) | | 8.5 | | | | | | | |
| Shelf life (in month, stored at 25°C or lower) | | 12 | | | | | | | |
| Specific density (at 20°C) | | 1.45 | | | | | | | |
| Extrusion time (sec) | | 5°C | 4 | | | | | | |
| Tack-free time (hr) | | 5°C | 8-24 | | | 3-5 | | | |
| | | 20°C | | | | | | | |
| Internal curing time (day) [Complete curing for 5 mm thick plate] | | 5°C | 15 | | | | | | |
| | | 23°C | 4 | | | | | | |
| Tensile adhesive strength | Test material | Processing conditions | Temperature | 50% tensile strength (N/mm ² {kgf/cm ² }) | Maximum tensile strength (N/mm ² {kgf/cm ² }) | Elongation at maximum load (%) | | | |
| | | | | Aluminum plate | After curing | 23°C | 0.12{1.2} | 0.51{5.2} | 800 |
| | | | | | After heating | 23°C | 0.16{1.6} | 0.59{6.0} | 710 |
| | Mortar plate | After water immersion | 23°C | 0.10{1.0} | 0.42{4.3} | 620 | | | |
| | | After curing | 23°C | 0.12{1.2} | 0.51{5.2} | 790 | | | |
| | | After heating | 23°C | 0.16{1.6} | 0.61{6.2} | 670 | | | |
| | After water immersion | 23°C | 0.10{1.0} | 0.41{4.2} | 430 | | | | |

* Testing of each item complies with JIS A 1439.

Amount used

| Joint depth (mm) | Joint width (mm) | | | | | |
|------------------|------------------|-----|-----|-----|-----|-----|
| | 5 | 10 | 12 | 15 | 18 | 20 |
| 5 | 11.6 | 5.8 | | | | |
| 7 | | 4.1 | 3.4 | | | |
| 8 | | 3.6 | 3.0 | 2.4 | | |
| 10 | | 2.9 | 2.4 | 1.9 | 1.6 | 1.4 |
| 12 | | | 2.0 | 1.6 | 1.3 | 1.2 |

* Workable length with one tube of Penguin Seal 2550LM (320 ml) (including 10% loss)
* For joints with large movement, 10 mm x 10 mm is recommended.

Precautions for Use

- Do not use on joints involving glass.
 - Do not apply the sealant at ambient temperatures below 5°C, or when the material is wet after rain or snow.
 - Wet conditions may lead to seal failure or seal expansion. Dry the surface completely before use.
 - To clean the receiving surfaces, use a non-abrasive cleaning agent. Do not use alcohol for cleaning.
 - Make sure to use the specified primer. Always apply a primer to the surface to which the sealant is to be applied.
 - Primer is susceptible to water. Make sure that no water is mixed into the primer.
 - When a primer can is opened, use it up within the day, if possible.
 - Apply the sealant using the appropriate joint width and depth.
 - If a substrate is used, use a bamboo knife to make sure that application surface has no scratches and is smooth (the sealing material may inflate).
 - Attach masking tape to the edge of the joint. If the sealing material is extremely thin, whitening may occur.
 - Some types of paints may have poor adhesion or be sticky. Check whether the paint type is appropriate for the application.
 - If paint is to be applied after sealing, painting should be performed within one week after the sealing surface is cured.
 - Store the product in a dark and cold place (25°C or lower), away from moisture, fire and direct sunlight.
 - The empty cans are regarded as industrial wastes. Ask an approved agency for disposal of them.
- <First-aid Treatment>
- Skin contact: Remove the sealant with a rag or something similar. Wash with soap and plenty of water. If itching or irritation occurs, seek medical attention immediately.
 - Eye contact: Wash with clean water for at least 15 minutes. Seek medical attention immediately.
 - Inhalation of fumes: Move to a fresh air area. Keep the body warm and at rest. Seek medical attention immediately.
 - Ingestion: Wash the mouth with water (induce vomiting, if possible). Seek medical attention immediately.
 - Contact with clothing: Remove with a rag or something similar. Wash with water. Make sure to avoid contact with clothing since Penguin Seal cannot be removed completely.

We have no responsibility for results caused by using this product without following the precautions for use.

Volume and packing form

| Product name | Volume | Quantity |
|--|--------------------------------------|---------------------------------|
| Penguin Seal 2550LM (Low modulus type) | Cartridge 320 ml Cartridge nozzle | 10 tubes } 2 boxes 5 tubes } |

■ For the cartridge gun, "SUNSTAR MAGNUM 33" is recommended.

■ Primer

| Product name | Volume | Quantity |
|--------------|--------|-------------|
| Primer US-1 | 500 ml | 10 cans/box |
| Primer UM-2 | 500 ml | 10 cans/box |

Notes

The information contained in this catalogue is based on our test results of the product. However, the properties of the product may be different according to the application conditions, therefore, confirm those conditions carefully before use. The product descriptions contained in this catalogue are subject to change without notice.

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