

TECHNICAL DATA SHEET

SEALSUM® HYBRID

SEALSUM Multi-purpose Hybrid Modified Silicone Sealant

DESCRIPTION

SEALSUM HYBRID is a specialized high performance and multi-functional sealant for sealing, bonding as well as for vibration reduction and sound deadening characteristics in constructions and civil engineering field. This hybrid sealant is a one-component, excellent adhesion, permanent elasticity to a various substrate, and eco-friendly characteristics due to free contained phthalate plasticizer and solvent. It also gives paintable, low-staining, excellent weather resistance and durability based on the strengths of polyurethane and silicone.

Acquired ISO 9001/14001

FEATURES

- Excellent adhesion to a broad range of material without use of primer.
- Excellent resistance of medicines such as acid, alkali etc.
- Eco-friendly (Free phthalate plasticiser)
- Wide temperature range (-30°C~90°C) that can used.
- Moisture curing
- Fast curing
- Excellent workability
- Free phthalate
- Free solvent
- Low-stain
- Low VOC

USES

- Bathrooms, Baths, Toilets, Showers
- Filling of construction joints, expansion wall joints and civil works
- Repair of concrete cracks and sealing around metal sashes
- Sealing of window perimeter, siding, doors
- Horizontal and vertical joints
- Interior and exterior
- Adheres to substrates such as concrete, masonry, aluminum, wood and stucco
- Joint of PVC panel , ALC panel etc.
- Connect part of interior such as clean-room.

SPECIFICATIONS

Properties	Test result
The time of surface hardening (23°C)	30~40 mins
Density (g/cm ³)	1.50±0.05
Processing Temperature (°C)	5~35
Curing Rate (mm/24hr)	2~.5
Hardness (Shore A)	40~45
Tensile Modulus (MPA)	1.5~2
Elongation (%)	1,000~1,200
Colour	Grey
Packing	Sausage 600ml
Shelf Life	12 months

* Depends on temperature, humidity, surface permeability, etc.

* Under generally accepted hygrothermal conditions

APPLICATION INSTRUCTIONS

PREPARATION

- Wipe substrate surface eliminating substances which interfere with adhesion including dust, oil, moisture, etc.
- Porous material with particle residue from sanding, cutting, etc. should be cleared of foreign particles by vacuum, or applying clean compressed air.

MASKING

- Using construction masking tape, cover substrate surface parallel with joint. This will ensure neat application of sealant.
- To avoid undesired adhesive residue from the masking tape, masking tape is to be removed same day as application of sealant.

PRIMING

- Before full scale application of sealant, adhesive potential of substrate to be joined is to be determined by sample testing.

- If it is determined that application of a primer is imperative to successfully sealing the joint, on porous substrate such as masonry, primer is to be applied by brush; on non-absorbent substrate such as glazed tile, application by cloth is recommended.
- For queries about use of primer, please consult SEALSUM technical department.
- Assess the amount of primer required for the full scale work, and partition it accordingly into a designated container. This is to avoid spoiling the remaining primer by excessive opening of the original container.

APPLICATION

- Before attaching to the sealant tube, slice off the tip of the applicator nozzle at an angle of 45°. Slice off the cap of the threaded stub at the end of the sealant tube and attach the applicator nozzle.
- Start applying sealant at the corners or intersections between joints. Avoid creating gaps in the ejected sealant whilst tracing along the length of the joint. Pause before sealing the complete length of the joint (sealant should only be applied in a direction away from an intersection or corner); resume sealing from the opposite end of the joint, tracing back to the point left off.
- Commence joint sealing immediately after the primer's specific designated drying time has elapsed.
- Use a spatula to press the sealant to remove gaps and ensure contact with both surfaces of the joint.

REMOVING MASKING TAPE

- Masking tape is to be carefully removed the same day; after the sealant has skinned, but not completely cured.

CLEANING

- Cleaning the immediate area around the freshly sealed joint should be conducted with care so as not to push nor lift the curing sealant from the surface of the joint.

CURING

- During the curing window, protect the joint from dust exposure and other contaminants, and prevent physical contact.

PRECAUTION

- Keep out of reach of children. Do not consume. Do not inhale potential fumes. Avoid contact with skin. Ingestion or contact may cause headaches, dizziness, dermatitis.
- Do not store or apply in hot or excessively humid environments. Do not store or apply in close proximity to fire.
- Sealant should be applied in an adequately ventilated environment. Continue continuous or periodic ventilation throughout the curing process.
- Use of product for unintended purposes may result in defect.
- Be careful not to impact the container.
- Keep container closed. Avoid moisture exposure to sealant to prevent sealant hardening.
- To achieve complete expression of sealant's intended properties, do not apply sealant in rainy, wet or excessively humid (>85% humidity) conditions; nor at temperatures below 5°C or exceeding 50°C. Please consult SEALSUM technical department if performing sealing at excessively cold, humid or wet conditions, as cracks in cured sealant, and/or incomplete adhesion may occur.
- Ambient environmental effects such as prolonged UV exposure may have undesired effects on the sealant finish, such as yellowing.
- Allowing for the designated curing time is critical to a successful seal. The curing speed of the sealant is dependent on environmental conditions, and the amount of sealant applied across the width of the joint.
- 6mm is the minimum recommended sealant depth between a joint for a standard successful seal.
- Adhesion may be affected if the joint surface is not free of foreign material and substances.
- Wear gloves and protective glasses when handling.

- Do not mix this product with other products (solvents, diluents, etc.).
- If the joint comprises a penetration and is a channel for airflow, this can inflate and deform the sealing and cause formation of air bubbles in the uncured sealant.
- Sealant is not to be directly applied on self-cleaning glass, or fluorine containing surfaces, as it can affect self-cleaning performance. Contact SEALSUM technical department for further information.
- During initial sealant curing after construction, large joint movements may cause surface wrinkles or cracks, so construction should be carried out during periods of low daily temperature difference without severe material contraction and expansion.
- Wash exposed skin thoroughly after completion of work.
- Be careful when cleaning areas where silicone has been applied, including the SEALSUM HYBRID, as continuous physical friction may cause sealant to lift from the surface of the joint.
- When disposing of this product, dispose of it through a waste disposal company designated by the Ministry of Environment.
- This product is a chemical product, so please use it within the expiration date as it may deteriorate if stored for a long time.

- In an area where food is handled or consumed, during application and curing.
- In a persistent high-pressure environment.
- An internal fire protection zone.
- Joints that are expected to wear due to physical friction.
- On joints where sealant is required to be painted over.
- On fluorine containing/self-cleaning glass.
- On plastic surfaces comprising polycarbonate.
- If applying to coated glass, perform a sample adhesion test on the joint surfaces.

Before performing sealing with SEALSUM HYBRID silicone sealant:

Perform a sample adhesion test on the joint surfaces where there is a presence of components that potentially interfere with adhesion. SEALSUM HYBRID may not be applicable if the joint is subject to physical movement such as expansion, compression and shifting; or subject to significant influence from the wind.

Incompatible materials can cause discoloration and poor adhesion, so please consult our technical department about various supplementary materials for a correspondence review.

It cannot be used on materials other than those intended for SEALSUM HYBRID applications, where contamination of the adhering surface by stone and other substances is a concern.

RESTRICTIONS

- SEALSUM HYBRID silicone sealant cannot be used under the following conditions.
- Avoid using it in situations where specialized specification products are needed, like crafting double-layer glass, composite panels, SSG construction, fishing ports, and continuous flooding areas.
- In conjunction with decolourising and adhesion inhibiting agents: oil, plasticiser, tar, wax, other solvents, etc.
- In an unventilated closed space.
- On wet surfaces (water content exceeding 3%).
- Products stored at 50°C or higher or frozen should not be used.
- In areas subject to submersion or burying.

HEALTH

Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

SAFETY

Avoid inhalation of potential fumes. Wash thoroughly after handling. Use outdoors or in an adequately ventilated space. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove affected person to an area with fresh air and which is comfortable to breath in. IF IN EYES: Rinse carefully with water for several minutes. Remove contact lenses, if present and convenient to do so. Continue rinsing. In the event of inhalation, skin or eye contact,

contact a poisons information hotline or other relevant medical provider.

FIRST AID

Eye contact: Immediately flush eyes and skin with running water for at least 20 minutes. Seek medical attention.

Skin contact: Immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing and shoes. Seek medical attention. Remove substance immediately if contacting skin. If small amount of substance contacts skin, prevent subdermal diffusion of the substance.

Inhalation: Keep warm and at rest. Immediately seek medical attention. If not breathing, supply oxygen and give artificial respiration. If present, displace dust and fumes by blowing clean air into the space clean air and take medical action if symptoms develop. Move person to fresh air.

Ingestion: Immediately seek medical attention. Rinse out mouth with drinking water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

AUSTRALIAN POISONS INFORMATION CENTRE:
13 11 26 (24 HOUR SERVICE), 000 (POLICE OR FIRE BRIGADE)

NOTES

The details and recommendations contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of publication of this Technical Data Sheet. Product properties may change with product improvement, subjecting the content of this Technical Data Sheet to change.

DISCLAIMER

To the maximum extent permitted by law, SEALSUM disclaims all warranties in relation to any loss or damage resulting from use of out-of-date product, incorrect use of the product, or negligence. Even if problems occur while using the product, SEALSUM's responsibility is limited to replacement and refund of such product.

Data was developed by the researchers in SEALSUM in-house laboratory and based on the hands-on work experiences. Data is subject to change with improvements to product quality. Data may not be optimized in some sites. Consult SEALSUM should you have any doubts.

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