



SL3000 LIQUID SILICON

Technical Datasheet
Version: 05/2011

Universal waterproof coating using exclusive SilicoTec® technology

Product type: Liquid coating based on exclusive Henkel **SilicoTec®** technology. Water-based 100% silicon product for waterproofing and repairing roofs. Ready to apply.

Certified as a product for waterproofing roofs according to ETAG 005 European Technical Approval.

Uses: **Waterproofing and protection for:**

- Flat and sloping roofs.
- Gutters.
- Roof terraces.
- Asphalt roofing felt.
- Joints at chimneys, skylights and ventilation outlets.

Especially suitable for reconstruction and repair of leaks, joints between tiled roofs and entry points of pipework.

Also suitable for flat roofs if applied at wet thicknesses of at least 2mm.

Properties:

- Up to 400% elasticity.
- High resistance to ultraviolet rays, rain and ageing.
- Waterproof even on roof terraces with standing water.
- High filling power.
- Permeable to water vapour.
- Keeps its flexibility at low temperatures.
- Withstands extreme temperatures (from -20°C to 80°C).
- Withstands occasional exposure to diluted acids and bases.
- Tools must be cleaned with water only.
- This product does not pose hazards of any kind.

Suitable surfaces:

Can be used on:

- Mineral, concrete, cement, fibre cement and ceramic surfaces.
- Asphalt, bituminous or plastic roofing felts.
- Acrylic coatings.
- Metals in general, copper, zinc, aluminium, stainless steel, brass.
- Plastic, ventilation pipe joints, joints at skylights.
- Thermal insulation, polyurethane, polystyrene
- Wood, chipboard, plywood.

To ensure perfect adhesion, the use of a primer is recommended.
Rubson FF 2000 Primer / Rubson SilicoTec Primer.

Features of the product:

- **Base:** Silicon
- **Appearance:** Doughy liquid
- **Colour:** Greyish, black, brick red and white
- **Density (20°C):** Approx. 1.3g/ml
- **Yield:** 1.3kg/m² per mm of wet thickness
- **Use:**
 - As waterproofing: **Recommended wet thickness:** 1.0 to 1.5mm (1.3 - 2.0kg/m²)
 - On flat roofs: Min. 2.0mm (2.6kg/m²)
 - Immersed in water: Min. 3.0mm (3.9kg/m²)
- **Application temperature:** Between 10°C and 30°C
- **Rainproof after:** from 3 to 7 hours*
- **Drying time:** 24 hours for 2mm*
- **Water diffusion coefficient (wet), μ** Approx. 1200
- **S_d value (2mm thick)** Approx. 2.4m

* - Times depend on the temperature and humidity of the air and the surface.

Classification according to ETAG 005 European Technical Approval:

- **Fire behaviour outdoors**
EN 13501-5 B_{roof} (t1)
- **Reaction to fire EN**
13501-5 E
- **Useful life** W2 (10 years)
- **Climate regions** M and S (moderate and severe)
- **Type of traffic** Up to P2 (moderate, accessible for maintenance)
- **Slope of roofs** S1 to S4 (all, from flat to vertical)
- **Minimum surface temperature** TL3 (-20°C)
- **Maximum surface temperature** TH3 (+80°C)

How to use:**- Preparing the surface:**

The surface must be completely clean, free from dust and grease, and dry (max. 5% residual humidity).

Remove moss, algae and lichen by hand, together with any loose fragments of old waterproofing or the surface material itself.

The features of Rubson SL 3000 Liquid Silicon (silicon-based and highly consistent) allow cracks to be repaired with the product itself. Open up the cracks in a wedge shape, fill with Rubson SL 3000 Liquid Silicon and leave to dry for 24 hours.

Check the slopes allow rainwater to drain away easily.

Absorbent surfaces:

Mineral and wooden surfaces must be cleaned mechanically. For new cement (less than 6 months old) and slightly powdery surfaces (cement mortars, for example) treatment with Rubson FF 2000 Primer / Rubson SilicoTec Primer (covers between 100 and 200g/m²) is recommended.

Bituminous surfaces:

All air pockets must be removed from bituminous material and irregularities repaired with mortar.

In reconstructing asphalt roofing felts, pay attention to the state of the top layers (surface with loose sand, for example). If necessary, remove them completely and apply Rubson FF 2000 Primer / Rubson SilicoTec Primer (covers between 100 and 200g/m²).

Metals:

Remove corroded parts and any traces of paint mechanically.

Plastics:

Sand to roughen these materials and clean with a white spirit-type solvent.

In general the product adheres well to PVC roofing felts. In any case, for plastics, please contact our Technical Support Service beforehand.

Any screwed joints, points with pipes passing through, joints, vents and skylights must first be treated with Rubson SL 3000 Liquid Silicon, embedding Rubson M 3000 reinforcing mesh in a layer of the product while wet. After this, apply a second coat of Rubson SL 3000 Liquid Silicon.

Take suitable precautions if working on older roofs with fibre cement or asbestos insulation.

- Applying the product:

Rubson SL 3000 Liquid Silicon needs no preparation and can be applied directly with a brush, roller or spatula. Alternatively, the airless spray technique can be used (please contact our Technical Support Service beforehand). If a coat of primer is applied first, let this dry completely before applying the product. Do not dilute the product with water under any circumstances.

Protecting surfaces

When using Rubson SL 3000 Liquid Silicon to waterproof sloping roofs, we recommend applying a coat at least 1.5mm thick when wet (2kg/m^2).

Joints in fibre cement roofs and assembly joints in roofing felt must first be sealed using Rubson SL 3000 Liquid Silicon. A final second coat can be applied after 10 - 12 hours.

Waterproofing

When using Rubson SL 3000 Liquid Silicon as a waterproof coating, according to the requirements for obtaining ETAG 005 European Technical Approval, two coats of the product must be applied and Rubson M 3000 fitted between the two coats. **The thickness while wet must be at least 2mm, which means a dry thickness of 1.5mm and coverage of at least 2.6kg/m^2 .**

The first coat of Rubson SL 3000 Liquid Silicon should be applied to the surface being treated (if treatment is required, use Rubson FF 2000 Primer / Rubson SilicoTec Primer) to a wet thickness of 1 - 2mm. Fit Rubson M 3000 reinforcing mesh over a wet coat of Rubson SL 3000 Liquid Silicon, making sure no air pockets or folds are left in it, and with an overlap of 10cm. The joints must run in the direction of the flow of water. Apply the necessary amount of Rubson SL 3000 Liquid Silicon to be covered by the Rubson M 3000 reinforcing mesh before the surface film forms.

We recommend waiting at least 24 hours before applying the second coat. The waiting time will depend on atmospheric conditions. The second coat must be 1 - 1.5mm thick.

Apply Rubson SL 3000 Liquid Silicon in dry weather, at ambient temperatures of between 10°C and 30°C .

The temperature of the surface to be treated must be between 10°C and 30°C . **In low temperatures, make sure the temperature of the surface is at least 3°C more than dew point (this depends on the temperature and relative humidity of the air); otherwise a film of water could form which would make it harder for the product to adhere.** If the temperature of the surface is above 30°C and it is directly exposed to the sun, apply the product in several thin coats (max. 1mm each) and leave each coat to dry completely before applying the next one. If this procedure is not followed air pockets may form.

Important:

The product is not to be used on transparent plastics (Plexiglas®, Makrolon® or PETG, for example). If the water from the roof is to be used for plants or fish, clean the surface thoroughly once the product has dried completely.

- Cleaning tools: Tools and traces of product can be cleaned with water while they are wet. Once they have dried they can only be cleaned by hand.

Format: **Colour:** Greyish, black, brick red and white
Format: 1, 5 and 25kg containers

**Shelf life /
Storage:**

Shelf life is at least 24 months in the original sealed container.
After this time has passed, the product may still be in good condition (checking it by means of a prior test is recommended, or consult our Technical Support Service).
The product must be stored at between 5°C and 40°C. Seal the container properly after each use.

Safety:

This product poses no hazard of any kind.
The maximum value for Volatile Organic Compounds (VOC) according to Directive 2004/42/EC for this product category is 140g/l. This product contains a maximum of 30g/l of VOC.
Material Safety Datasheet available at <http://mvmsds.henkel.com>



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In view of the different working conditions and the diversity of materials, we always recommend that prior tests be carried out. The conditions in this technical datasheet are given for general guidance purposes. We cannot accept any responsibility or obligation with regard to the generic instructions in this datasheet. In case of doubt, please contact our Technical Support Service.