

## Technical Data Sheet

# Rajasil SHF

(Silicon resin paint)

**Rajasil SHF:** Silicon resin emulsion paint in accordance with VOB DIN 18 363 2.4.1. This product is a high-quality, eco-friendly, water-repellent, open-porous coating system. There is no film-formation.

**Properties:** Exceptional water vapor and carbon dioxide permeability. Renders containing lime can cure under the paint coat. Highly water-repellent. Minimizes frost damage, mold and algae formation, efflorescences, formation of stains, which often are the result of excessive water absorption at facades. Coats inactive cracks of up to about 0.2mm in width. Condensation water penetrating through possible subsequent larger cracks can dry up quickly. Additional protection of the coating from algae and fungal infestation.

**Areas of Application:** equalizing coat (unique painting) and quality painting (double painting) on structurally sound mineral substrates and suitable, structurally sound existing paint coats. Due to its exceptional water vapor permeability and water-repelling properties, Rajasil SHF (Siliconharzfarbe) is particularly suitable for refurbishment work and thermal insulation systems, e.g. on Rajasil SP renovation renders or Rajasil KP lime renders etc.

Only use one vertical surfaces!

Responsibility for any usage exceeding these areas of application lies solely with the user.

**Composition:** Polysiloxane emulsion, mineral pigments and fillers

**Technical Data:**

Sd:	< 0.05m / V1 high
w:	< 0.1 kg / (m <sup>2</sup> h <sup>0.5</sup> ) / W3 low

**Coverage:**

Rajasil SHF (Siliconharzfarbe) Prime and final coat (depending on render surface properties)	0.3 - 0.4 l / m <sup>2</sup> approx.
Rajasil NIG (Nano Impragnierung und Grundierung) Priming	0.2 - 0.3 l / m <sup>2</sup> approx.

**Substrate:**

Unsuitable:

Timber, facing brick, plastic, metal, oil-based paint, and lacquer coatings

Suitable:

Clean, firm, efflorescence-free, mineral substrates, e.g. new and existing render, natural stone, clay brick, lime sand stone, concrete and fiber cement surfaces, intact emulsion paint coats and synthetic resin renders (check adhesion - cross-cut test)

Newly applied renders CS II to IV in accordance with DIN EN 998-1 (P II and P III in accordance with former DIN V 18 550) can be painted over after 10 days at the earliest, if a uniform, dry surface is present. Predominantly lime-bonded renders CS I (P I) require longer waiting periods. Carbonatization depth must be at least 2 mm. Make sure surface is uniformly dry.

**Preparation of the Substrate:**

**Make sure to carefully cover glass, metal and ceramic surfaces, natural stone facings etc. prior to painting.**

Possible repairs to render surfaces should be carried out with a mortar whose post-curing properties (absorbency, strength, texture) match those of the existing render. Prior to painting, set up a test panel to verify color.

Clean substrate thoroughly, e.g. with pressurized-water jets, and allow sufficient time for drying. Treat fungal, algae and moss infestations with Rajasil FUNGIZID (Fungizid).

Remove coats the load-bearing capacity of which is no longer sufficient until the surface with sufficient load-bearing capacity has been reached.

Consolidate brittle, insufficiently structurally sound mineral renders as well as old, chalking mineral paint coats with Rajasil PF (Putzfestiger) beforehand. (Refer to Technical Data Sheet.)

On **structurally sound** emulsion paint coats or synthetic resin renders: two-coat paint application without priming.

Remove old **defective** dispersion paint coats using paint stripper and superheated steam (local requirements must be observed).

Existing, intact silicon impregnations can simply be coated over with Rajasil SHF (Siliconharzfarbe).

Natural stones must be stable, dry and efflorescence-free. Rajasil STRM (Steinrestauriermortel) stone repair mortars must have cured properly. Clean thoroughly but gently using water or other suitable methods. After the completion of necessary stone consolidation measures, using e.g.

Rajasil OH 100 (Steinfestiger OH 100), observe a sufficient waiting time (approx. 3 weeks).

Lime sand stone masonry must be suitable for facing brickwork. Make sure jointing is free of cracks but not overly smooth.

Concrete surfaces: any release agent residues must be removed

**Application and Substrate Temperature:**

+ 5 °C minimum

lower temperatures during the drying phase can have a sustained effect on product properties.

<b>Application:</b>	<p>Surface coating system: Apply individual coats using brush, roller or airless spraying application. Only use one of the application methods, as switching between methods - e.g. roller and brush application on the same surface - can result in color divergences.</p> <p><u>Priming:</u> Prime using Rajasil NIG (Nano Imprägnierung und Grundierung). For highly absorbent substrates or at wall base areas, we recommend wet-on-wet two-layer primer application. If existing older silicon impregnations are painted over, priming may be omitted in some cases. On particularly exposed façade surfaces (steeples etc.), two-layer wet-on-wet flood priming is recommended to ensure even penetration. Coverage may decrease slightly in some cases.</p> <p><u>Prime coat:</u> Dilute Rajasil SHF (Siliconharzfarbe) with up to 10% water max.</p> <p><u>Final coat:</u> Apply Rajasil SHF (Siliconharzfarbe) undiluted or mixed with 5% water max. For an equalizing coat on surfaces finished with colored mineral renders: one- or two-coat application of Rajasil SHF (Siliconharzfarbe).</p> <p><u>Interior use:</u> Two-coat application, on conventional mineral substrates without priming; washing resistant I accordance with DIN 53 778</p>
<b>After Treatment:</b>	Protect freshly applied paint sufficiently from direct sunlight, wind, rain and frost. High air humidity levels prolong the time required for drying.
<b>Drying time:</b>	Allow a minimum of 12 hours to lapse between each work step.
<b>Cleaning of Tools:</b>	Immediately after use, with water
<b>Note on Factory- Provided Colorization:</b>	<p>On principle, coatings will be adjusted according to the color fan deck or according to the samples provided. Prior to application of the paint coat, set up a test panel and compare to the color on the color fan deck or to the requested custom color.</p> <p>Application method and application conditions - such as e.g. type, absorbency and surface texture of the substrate (see also VOB DIN 18 363, paragraph 3.1.1), weather conditions or environmental reflexes - can result in color divergences.</p> <p>When placing a follow-up order, please make sure to provide: the date of your initial order, the batch number, as well as the shipping note/invoice number.</p> <p>The use of mineral raw materials may result in slight color divergences in follow-up deliveries. We therefore strongly recommend using only material from a single shipment for continuous surfaces.</p> <p>Complaints made after application as to divergences in color from the color fan deck or from the sample provided cannot be accepted. Also, divergences in color that are a result of the circumstances described do not constitute a reason for complaint.</p>
<b>Notes:</b>	Changes in color and surface texture over the course of time due to weather impact and environmental factors, e.g. atmospheric particles, are not covered by warranty. More information can be found in BFS Merkblatt (BFS Leaflet) No. 26 ("Farbveränderungen von Beschichtungen im Außenbereich" [Colour changes of coatings in outdoor areas], 2007). Technical functionality remains unaffected. Condensation prior to or during application as well as during drying can result in the formation of stains/spots. Only work in suitable weather conditions. Under adverse conditions, the formation of micro-organisms, e.g. algae, cannot be ruled out and does not constitute a reason for complaint.
<b>Safety Instructions:</b>	Protect eyes and skin. If product gets on skin, wash off with soap and water. If product gets in eyes, thoroughly rinse with plenty of water immediately and seek medical attention. Provide sufficient ventilation. Wear suitable protective gloves. If product is swallowed, seek medical attention immediately. Keep product out of the reach of children. For further information see Safety Data Sheet.
<b>Storage:</b>	Store in original container in a cool, frost-free place; shelf-life 12 months max
<b>Quality Control:</b>	Constant monitoring of production through laboratory analyses.



The information given herein is based on our present knowledge and experience. However, it implies no liability on our part. We reserve the right to make changes according to technological progress or further developments. This information serves to describe the properties of our products and services, and no warranty is intended or implied. The customer is not released from the obligation to conduct careful inspection of the functions and applications of incoming goods by qualified personnel. This is also valid with regard to existing third party intellectual property rights. Reference to trade names used by other companies is neither a recommendation nor does it imply that other similar products could not be used. With this publication, earlier Technical Data Sheets become invalid

**HECK Wall Systems GmbH**  
Thöläuer Straße 25  
95615 Marktredwitz / Germany  
T: +49 9231 802-330  
F: +49 9231 802-330  
[www.wall-systems.com](http://www.wall-systems.com)