

**Product Data Sheet**  
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Icosit® K-25 (I)

## Icosit® K-25 (I)

### 2 part epoxy resin protective coating

<b>Product Description</b>	Icosit® K-25 (I) is two part, coloured all purpose epoxy resin based protective coating.
<b>Uses</b>	<ul style="list-style-type: none"> <li>■ For use on concrete, cementitious mortars and rendering, epoxy mortars (including Sika® EpoCem®), steel, stones, wood etc.</li> <li>■ As an anti-corrosion coating in food and beverage processing plants, sewage works, agricultural, chemical and pharmaceutical plants, bottling plants etc.</li> </ul>
<b>Characteristics / Advantages</b>	<ul style="list-style-type: none"> <li>■ Corrosion resistance</li> <li>■ Protect cementitious structures against weathering</li> <li>■ Resistant to oil and grease</li> <li>■ Weather-proof</li> <li>■ Mild dew-resistant</li> <li>■ Good chemical resistance</li> <li>■ Resistance to carbonation attack</li> <li>■ Suitable for portable water reservoirs</li> <li>■ Thixotropic, no runs on vertical surface</li> <li>■ Easy to apply</li> </ul>
<b>Product Data</b>	
<b>Form</b>	
<b>Appearance / Colours</b>	<p>Resin - Part A:      coloured liquid Hardener - Part B:    light yellow liquid</p> <p>Available colour shades: ~RAL1002 (Sand yellow), 1013 (Oyster white), 1014 (Ivory), 2009 (Traffic orange), 6034 (Pastel turquoise) , 7001 (Silver grey), 7034 (Yellow grey), 7035 (Light grey), 7038 (Agate grey), 8001 (Ochre brown), 9001 (Cream), 9003 (Signal white)</p> <p>Above colours are approximate</p> <p>Under direct sun light there may be some discolouration and colour variation, this has no influence on the function and performance of the coating.</p>
<b>Packaging</b>	<p>Part A:      3.2 kg x 2 containers Part B:      0.8 kg x 2 containers Part A+B:    4.0 kg x 2 ready to use units</p>
<b>Storage</b>	
<b>Storage Conditions / Shelf-Life</b>	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +35°C. Protect from frost



## Technical Data

<b>Chemical Base</b>	Epoxy
<b>Density</b>	Part A: ~1.20 kg/l Part B: ~ 0.88kg/l Mixed resin: ~ 1.12kg/l  All density values at +27°C
<b>Solid Content</b>	~ 60% (by weight)
<b>Application Temperature</b>	Min 8°C, Max 40°C

## Mechanical / Physical Properties

### Resistance

#### Chemical Resistance

Test medium	T	24 h	3 d	7 d	42 d	90 d	6 m
Acetone	30°C	A	A	A	A	A	A
Ethanol 96%	30°C	A	A	A	A	A	A
Acetic acid 5%	30°C	A	A	D	C		
Lactic acid 10%	30°C	A	D	C			
NaOH 50%	30°C	A	A	A	A	A	A
Nitric acid 10%	30°C	A	A	A	C		
Hydrochloric acid 10%	30°C	A	A	A	D	C	
Sulphuric acid 10%	30°C	A	A	D	D	D	D
Diesel	30°C	A	A	A	A	A	A

\*acc. IS 4631-1968

A = resistant, D = resistant but with discolouration and/or loss of gloss, C = not resistant

#### Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C

\*No simultaneous chemical and mechanical exposure.

## System Information

<b>System Structure</b>	Primer: 1 x Icosit® K-25 (I) Seal coat: 2 - 3 x Icosit® K-25 (I) (roller application) or 1 - 2 x Icosit® K-25 (I) (spray application)
	* For the application onto gypsum plaster boards, please refer to 'Notes on Application / Limitations'.

## Application Details

#### Consumption / Dosage

Coating System	Product	Consumption
Primer	Icosit® K-25 (I)	~ 0.15– 0.2 kg/m <sup>2</sup>
Seal coat	2 - 3 x Icosit® K-25 (I) (roller application)	0.15 - 0.2 kg/m <sup>2</sup> per coat

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.

<b>Substrate Quality</b>	<p>The concrete substrate must be sound and of sufficient compressive strength (minimum 20 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>.</p> <p>The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.</p> <p>If in doubt apply a test area first.</p>
<b>Substrate Preparation</b>	<p>Concrete substrates must be prepared mechanically using grinding equipment, abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.</p> <p>Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.</p> <p>Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor<sup>®</sup>, Sikadur<sup>®</sup> and Sikagard<sup>®</sup> range of materials.</p> <p>The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.</p> <p>High spots must be removed by e.g. grinding.</p> <p>All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.</p>
<b>Application Conditions / Limitations</b>	
<b>Substrate Temperature</b>	+8°C min. / +35°C max.
<b>Ambient Temperature</b>	+8°C min. / +35°C max.
<b>Substrate Moisture Content</b>	<p>≤ 4% moisture content.</p> <p>Test method: Sika<sup>®</sup> Tramex meter, CM - measurement or Oven-dry-method.</p> <p>No rising moisture according to ASTM (Polyethylene-sheet).</p>
<b>Relative Air Humidity</b>	75% r.h. max.
<b>Dew Point</b>	<p>Beware of condensation!</p> <p>The substrate and uncured floor coating must be at least 3°C above dew point to reduce the risk of condensation or blooming on the coating finish.</p>
<b>Application Instructions</b>	
<b>Mixing</b>	Part A : Part B = 4 : 1 (by weight)
<b>Mixing Time</b>	<p>Prior to mixing, stir Part A mechanically. When all of part B has been added to part A, mix continuously for 2 minutes until a uniform mix has been achieved.</p> <p>To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.</p> <p>Over mixing must be avoided to minimise air entrainment.</p>
<b>Mixing Tools</b>	Icosit <sup>®</sup> K-25 (I) must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.
<b>Application Method / Tools</b>	<p>Prior to application, confirm substrate moisture content, relative humidity and dew point.</p> <p>If &gt; 4% moisture content, Sikagard<sup>®</sup>-720 EpoCem<sup>®</sup> may be applied as a Temporary Moisture Barrier (TMB) system.</p> <p><i>Primer:</i> Make sure that a continuous, pore free coat covers the substrate. Apply Icosit<sup>®</sup> K-25 (I) by brush or roller.</p> <p><i>Wall coating:</i> Apply Icosit<sup>®</sup> K-25 (I) by roller.</p>
<b>Cleaning of Tools</b>	Clean all tools and application equipment with Sika <sup>®</sup> Colma Cleaner or suitable thinner immediately after use. Hardened and/or cured material can only be removed mechanically.

**Potlife**

4 kg mass

Temperatures	Time
+10°C	~ 120 minutes
+20°C	~ 60 minutes
+30°C	~ 30 minutes

**Waiting Time / Overcoating**

Before applying Icosit® K-25 (I) on Icosit® K-25 (I) allow:

Substrate temperature	Minimum	Maximum
+10°C	16 hours	7 days
+20°C	8 hours	7 days
+30°C	4 hours	7 days

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity

**Notes on Application / Limitations**

Do not apply Icosit® K-25 (I) on substrates with rising moisture.

Do not apply Icosit® K-25 (I) on gypsum plaster boards, if in use for wet areas, such as shower rooms etc.

Freshly applied Icosit® K-25 (I) must be protected from damp, condensation and water for at least 24 hours.

Avoid puddles on the surface with the primer.

Always ensure adequate fresh air ventilation when using Icosit® K-25 (I) in a confined space to avoid curing problems.

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

For exact colour matching, ensure the Icosit® K-25 (I) in each area is applied from the same control batch numbers.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

**Curing Details****Applied Product ready for use**

Temperature	Tack free time	Full cure
+10°C	~ 20 hours	~ 10 days
+20°C	~ 6 hours	~ 7 days
+30°C	~ 3 hours	~ 7 days

Note: Times are approximate and will be affected by changing ambient conditions.

**Value Base**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

**Health and Safety Information**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



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