

Product Data Sheet
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Sikagard® PU UR (W)

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Single component water dispersed polyurethane coating

Product Description

Sikagard®-PU UR (W) is a single component coloured, water dispersed polyurethane coating.

Uses

- Coloured coating for interior wall surfaces
- For concrete or cementitious substrates
- Suitable for production facilities, storage and logistic areas etc.

Characteristics / Advantages

- Good chemical and mechanical resistance
- Good bond on damp surfaces
- Good opacity
- Decontaminable
- High resistance to carbonation
- Easy application
- Spray application is possible
- Easy to clean
- Good sag resistance

Product Data

Form

Appearance / Colours

coloured, liquid

Available colour shades: ca. RAL 1002 (Sand yellow), 1013 (Oyster white), 1014 (Ivory), 2009 (Traffic orange), 6034 (Pastel turquoise), 7001 (Silver grey), 7034 (Yellow grey), 7035 (light grey), 8001 (Ochre brown), 9001 (Cream), 9003 (Signal white).

Under direct sun light there may be some discolouration and colour variation, this has no influence on the function and performance of the coating.

Construction



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| Packaging | Sikagard® PU UR (W) : 4 kg x 2 containers Sikagard® PU UR (W) Primer : 2kg x 2 containers |
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Storage

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| Storage Conditions / Shelf-Life | 6 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 |
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Technical Data

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| Chemical Base | Polyurethane, water dispersed |
| Density | ~1.26kg/l All density values at +27°C |
| Solid Content | ~ 49% (by weight) |

Mechanical / Physical Properties

Resistance

Chemical Resistance Resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance

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| Exposure* | Dry heat |
| Permanent | +50°C |
| Short-term max. 7 d | +80°C |

*No simultaneous chemical and mechanical exposure.

System Information

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| System Structure | Primer: 1x Sikagard® PU UR (W) Primer Seal coat: 2 - 3 x Sikagard® PU UR (W) (roller application) * For the application onto gypsum plaster boards, please refer to 'Notes on Application / Limitations'. |
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Application Details

Consumption / Dosage

| Coating System | Product | Consumption |
|----------------|--|--------------------------------------|
| Primer | SikaPrimer® PU UR (W) Primer | ~ 0.08 -0.12 kg/m ² |
| Seal coat | 2 - 3 x Sikagard® PU UR (W) (roller application) | 0.1 - 0.2 kg/m ² 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.

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| Substrate Quality | The concrete substrate must be sound and of sufficient compressive strength (minimum 20 N/mm ²) with a minimum pull off strength of 1.5 N/mm ² . The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. If in doubt apply a test area first. |
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| Substrate Preparation | <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®, Sikadur® and Sikagard® 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> |
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Application Conditions / Limitations

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|-----------------------------------|--|
| Substrate Temperature | +8°C min. / +35°C max. |
| Ambient Temperature | +8°C min. / +35°C max. |
| Substrate Moisture Content | <p>≤ 6% moisture content.</p> <p>Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method.</p> <p>No rising moisture according to ASTM (Polyethylene-sheet).</p> |
| Relative Air Humidity | 75% r.h. max. |
| Dew Point | <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> |

Application Instructions

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| Mixing | Sikagard® PU UR (W) is supplied in ready to use form. Stir Sikagard® PU UR (W) thoroughly before application. |
| Mixing Tools | Sikagard PU UR (W) must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. |
| Application Method / Tools | <p>Prior to application, confirm substrate moisture content, relative humidity and dew point.</p> <p>If > 6% moisture content, Sikagard®-720 EpoCem® 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 the Sikagard® PU UR (W) by brush or roller.</p> <p><i>Wall coating:</i> Apply Sikagard® PU UR (W) by roller.</p> |

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| Cleaning of Tools | Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be removed mechanically. |
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Potlife

| Temperatures | Time |
|--------------|---------------|
| +10°C | ~ 150 minutes |
| +20°C | ~ 90 minutes |
| +30°C | ~ 60 minutes |

Waiting Time / Overcoating

Before applying Sikagard® PU UR (W) Primer on Sikagard® PU UR (W) allow:

| Substrate temperature | Minimum | Maximum |
|-----------------------|---------|----------|
| +10°C | 4 hours | 24 hours |
| +20°C | 2 hours | 12 hours |
| +30°C | 1 hour | 6 hours |

Before applying Sikagard® PU UR (W) on Sikagard® PU UR (W) allow:

| Substrate temperature | Minimum | Maximum |
|-----------------------|----------|---------|
| +10°C | 24 hours | 7 days |
| +20°C | 24 hours | 7 days |
| +30°C | 12 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 Sikagard® PU UR (W) on substrates with rising moisture.

Freshly applied Sikagard® PU UR (W) must be protected from damp, condensation and water for at least 24 hours.

Avoid puddles on the surface with the primer.

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

For exact colour matching, ensure the Sikagard® PU UR (W) in each area is applied from the same control batch numbers.

For spray application the use of protective health & safety equipment is mandatory!

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O 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 | ~ 12 hours | ~ 10 days |
| +20°C | ~ 6 hours | ~ 7 days |
| +30°C | ~ 3 hours | ~ 7 days |

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.



Sika India Pvt. Ltd.
Commercial Complex II
620, Diamond Harbour Road
Kolkata, 700 034, India

Phone +91 33 2447 2448/2449
Telefax +91 33 2468 8688/2665
www.sika.in
info@in.sika.com