



**PRODUCT DATA SHEET**

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CSC Master Format™ 09 67 23 (09 96 35)  
RESINOUS FLOORING

# Sikagard® WDE Primer

## MOISTURE-TOLERANT EPOXY RESIN PRIMER AND BINDER

<b>Description</b>	Sikagard® WDE Primer is a two-component, high-solids and fast-curing epoxy resin, tolerant to substrate moisture < 6 % (p.b.w. – part by weight), as determined with Tramex® CM/E meter and capable of curing at temperatures down to 0 °C (32 °F).
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>Sikagard® WDE Primer is used to prime and isolate concrete substrates prior to the application of Sikagard® CRV-20 and Sikagard® Duochem 7500 for chemical containment works.</li> <li>Sikagard® WDE Primer is also used as low temperature curing binder to produce high strength resurfacing mortars for use in such facilities as cold rooms.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>Versatile in use as neat primer beneath smooth coatings, a broadcast primer for build-up systems and a binder for site produced resurfacing mortars.</li> <li>Low viscosity, easy to mix and highly penetrative.</li> <li>Cures down to 0°C (32°F), reducing need for hoarding and heating.</li> <li>Fast-curing properties are ideal for shutdown or fast turnaround projects.</li> <li>Good resistance to a wide variety of chemicals, acids, organic acids and alkalis, providing a secondary line of protection.</li> <li>Meets the requirements of CFIA and USDA for use in food plants.</li> </ul>

**Technical Data**

<b>Packaging</b>	8 L (2 US gal.) unit (Component A: 6 L resin; Component B: 2 L hardener) Component A supplied as 2 x short-filled 10 L pails each with 6 L resin. Component B supplied as one carton containing 2 x short-filled 3.78 L cans each with 2 L hardener.		
<b>Colour</b>	Clear		
<b>Yield</b>	4 m <sup>2</sup> /L (160 ft <sup>2</sup> /US gal.) per coat approx. at 10 mils wft. Figures do not allow for surface profile, porosity or wastage.		
<b>Shelf Life</b>	2 years in original, unopened and undamaged packaging. Store dry at 5 to 32 °C (41 to 89 °F). Condition product at 18 to 30 °C (65 to 86 °F) before using.		
<b>Mix Ratio</b>	A:B = 3:1 by volume		
<b>Properties at 23 °C (73 °F) and 50 % R.H.</b>			
<b>Component</b>	<b>A Resin</b>	<b>B Hardener</b>	<b>Mixed A + B</b>
Specific Gravity, kg/L (lb/US gal.)	~ 1.12 (9.34)	~ 1.05 (8.73)	~ 1.1 (9.19)
Viscosity	~ 600 cps	~ 2000 cps	~ 900 cps
<b>Pot Life, 200 g (7.05 oz)</b>	~ 8 min		
<b>Waiting time between coats, 20°C (68°F)</b>		<b>Minimum</b>	<b>Maximum</b>
Sikagard® WDE Primer on WDE Primer	Neat	~ 6 hrs	~ 24 hrs
	Broadcast	~ 4 hrs	Indefinite
	Broadcast @ 10°C (50°F)	~ 10 hrs	Indefinite
Sikagard® CRV-20 on WDE Primer	Neat WDE Primer	~ 6 hrs	~ 24 hrs
	Broadcast WDE Primer	~ 4 hrs	Indefinite
Sika® epoxy systems on WDE Primer		~ 6 hrs	~ 24 hrs
	@ 0 °C (32 °F)	~ 24 hrs	~ 48 hrs

*Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.*

**HOW TO USE**

<b>Surface Preparation</b>	The concrete surface must be dry, clean and sound. Remove all existing coatings, impregnations, wax films, curing grease, oil, dirt, curing agents, laitance, foreign matter or loose and disintegrated material from surface by appropriate mechanical means, in order to achieve a profile equivalent to ICRI-CSP 3- 4. The strength of the substrate should be at least 25 MPa (3625 psi) at 28 days in compression and 1.5 MPa (218 psi) in tension at the time of Sikagard® WDE Primer application.
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<b>Mixing</b>	<p><b>Mix Ratio: Components A:B = 3:1 (by volume)</b></p> <p>For part mixing, i.e. when not mixing full units, each component must be pre-agitated separately to ensure product uniformity. Pre-stir Components A and B separately, making sure all solids, are evenly distributed and uniform consistencies are achieved within each individual Component. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin) or empty Component A into a suitably sized and clean pail and add Component B in the correct ratio. Blend the combined components thoroughly at low speed (300 - 450 rpm) for at least three (3) minutes using a drill fitted with an <i>Exomixer</i><sup>®</sup> or <i>Jiffy</i> type paddle suited to the dimensions of the mixing container and keep the mixing paddle in the mix to minimize entrapped air. Take care not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.</p> <p><b>Note:</b> Do not try to attend to unmixed material that may gather on the sides of the mixing container while mechanical or electrical parts are in motion.</p> <p>When completely mixed, Sikagard<sup>®</sup> WDE Primer should be uniform in appearance and consistency.</p> <p><b>Important:</b> Mixing attempted at material and ambient temperatures below 18 °C (65 °F) will result in a decrease in product workability. Do not mix more material than can be applied within the short working time limits (i.e. Pot Life) at actual field temperature.</p>
<b>Application</b>	<p><b>Sikagard<sup>®</sup> WDE Primer:</b> The mixed resin should be applied at 4 m<sup>2</sup>/L (163 ft<sup>2</sup>/US gal.) using a brush or roller when used as a primer for other Sika products. When it is used as a first coat of a build up system it is normal to broadcast Bell and MacKenzie Flint Silica # 32 or # 505 Silica sand to saturation at a rate of 1 - 1.5 kg/m<sup>2</sup> (20 - 30 lb/100 ft<sup>2</sup>), allow cure and then vacuum off excess sand before proceeding.</p> <p><b>Sikagard<sup>®</sup> WDE Primer Mortar:</b> Prime the concrete with the Sikagard<sup>®</sup> WDE resin and apply mortar while still tacky. Mix 3.75 L (1 US gal.) Sikagard<sup>®</sup> WDE Primer with 2 x 20 kg (44 lb) Sika<sup>®</sup> Aggregate PT to provide a hand trowel mortar. Apply mortar in accordance with good epoxy mortar practice, placing mortar wet on wet onto the primer and spread the mortar to the appropriate thickness using a large wood float, rake or screed box. Using a float or stainless steel finishing trowel, uniformly compact and smooth the surface. At all times take into consideration the fast-cure nature of the binder.</p>
<b>Clean Up</b>	<p>Clean all tools and equipment immediately after use with Sika<sup>®</sup> Epoxy Cleaner. Once hardened, material can only be removed mechanically. Wash soiled hands and skin thoroughly in hot water. Dispose of product in accordance with current applicable local, provincial and federal regulations.</p>
<b>Limitations</b>	<ul style="list-style-type: none"> <li>▪ Sikagard<sup>®</sup> WDE Primer is best installed by skilled and experienced applicators. Consult Sika Canada for advice and recommendations.</li> <li>▪ Prior to application, measure and confirm the following: substrate moisture content, ambient relative humidity and surface temperature and dew point. During installation, confirm and record above values at least once every three (3) hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/decrease, etc.).</li> <li>▪ Moisture content of a concrete substrate must be &lt; 6 % (pbw -part by weight) as measured with a Tramex<sup>®</sup> CME/CM Expert type concrete moisture meter on mechanically-prepared surface according to this product data sheet (preparation to ICRI / CSP 3 - 4). Do not apply to concrete substrate with moisture levels exceeding 6 % (pbw – part by weight) as measured with Tramex<sup>®</sup> CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate exceeds 6 % (pbw – part by weight) as measured with Tramex<sup>®</sup> CME/CMExpert type concrete moisture meter, use Sikafloor<sup>®</sup>-81 EpoCem<sup>®CA</sup> on horizontal surfaces and Sikagard<sup>®</sup>-75 EpoCem<sup>®CA</sup> on walls and overhead applications.</li> <li>▪ <b>Beware of condensation!</b> The substrate must be at least 3 °C (5 °F) above the dew point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.</li> <li>▪ <b>Product temperature:</b> Precondition product for at least 24 hours at temperatures between 18 and 24 °C (65 to 75 °F).</li> <li>▪ <b>Ambient and substrate temperature:</b> Minimum / Maximum 0 °C / 30°C (32 °F / 86°F).</li> <li>▪ Do not apply at an ambient relative humidity above 85 %.</li> <li>▪ Mixing and application attempted at material, ambient and/or substrate temperature conditions less than 18 °C (65 °F) will result in a decrease in product workability and slower cure rates.</li> <li>▪ Do not hand mix Sikagard<sup>®</sup> materials. Mechanically mix only. Pre-stir each component thoroughly and do not allow mixed material to stand and settle. Failure to pre-stir and keep product agitated will result in variation in gloss levels appearance and performance.</li> <li>▪ Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Use of thinners will void any applicable Sika<sup>®</sup> warranty.</li> <li>▪ Freshly applied material should be protected from dampness, condensation and water for at least 24 hours.</li> <li>▪ Do not apply Sikagard<sup>®</sup> to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikagard<sup>®</sup> product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.</li> <li>▪ Any aggregate used with Sikagard<sup>®</sup> systems must be non-reactive and oven-dried.</li> <li>▪ This product is not designed for negative side waterproofing.</li> <li>▪ Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.</li> </ul>

**Limitations  
Continued...**

- Do not apply onto porous surfaces where moisture vapour transmission will occur during application.
- Do not apply to surfaces where moisture vapour can condense and freeze.
- Do not apply to polymer modified cement mortars (PCC) that may expand when sealed with an impervious resin.
- Direct-fired gas or kerosene heaters produce by-products that can have adverse effects on the curing primer. To avoid this occurrence, heaters must be exhausted to the exterior of the building to avoid defects such as amine blush, whitening, loss of adhesion or other surface deficiencies.
- Mechanical, chemical & physical properties will be fully achieved at full cure.

**Health and Safety  
Information**

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: [www.sika.ca](http://www.sika.ca)

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