

PRODUCT DATA SHEET

Sikagard[®]-600

CHEMICAL RESISTANT PROTECTIVE COATING

PRODUCT DESCRIPTION

A two-component, high solids, clear novolac epoxy with exceptional chemical resistance. Sikagard[®]-600 can be installed as a stand-alone coating. Its versatility allows Sikagard[®]-600 to be applied as a topcoat or used as a binder in a slurry/broadcast system.

USES

Designed for use as a medium to heavy coat epoxy resurfacer in areas subjected to chemical spillages. Ideal for use in chemical processing, chemical storage areas, and battery charge stations.

CHARACTERISTICS / ADVANTAGES

- Low odor
- Very good chemical resistance
- Easy application

PRODUCT INFORMATION

Packaging	Component A: 2.0 US gal. (7.6 L); Component B: 1 US gal. (3.8 L); Component A+B: 3.0 US gal. (11.3 L) (Ready to mix unit).
Appearance / Color	Clear
Shelf Life	2 years in original unopened container under proper storage conditions.
Storage Conditions	Store dry between 40 °F and 90 °F (4–32 °C). Precondition material for at least 24 hours between 65 °F to 75 °F (18° to 24°C).

TECHNICAL INFORMATION

Shore D Hardness	85–88	(ASTM D-2240) 73 °F (23 °C) 50 % R.H.
Abrasion Resistance	25 mg loss	(ASTM D-4060)

Compressive Strength	400 psi (28 days)	(ASTM D-695 9) 73 °F (23 °C) 50 % R.H.
Tensile Strength	4,340 psi (7 days)	(ASTM D-638) 73 °F (23 °C) 50 % R.H.
Elongation at Break	24 %	(ASTM D-695 9) 73 °F (23 °C) 50 % R.H.
Tensile Adhesion Strength	> 400 psi (2.76 MPa) (100 % concrete failure)	(ASTM D-4541) 73 °F (23 °C) 50 % R.H.
Chemical Resistance	Please consult Sika Technical Services.	

APPLICATION INFORMATION

Coverage Approximately 80–130 ft²/US gal (1.9–3.2 m²/L) at 12 to 20 mils (0.3–0.5 mm) wet film thickness (w.f.t) or 240–390 ft²/US gal (5.9–9.6 m²/L) per 3 gallon unit over primed, relatively smooth, dense concrete surfaces.

(The above figures do not allow for surface profile or wastage).

Pot Life	Temperature	Time
	50 °F (10 °C)	~ 50 minutes
	68 °F (20 °C)	~ 25 minutes
	86 °F (30 °C)	~ 15 minutes

Do not apply after indicated pot life is exceeded. end of pot life is not visible.

Cure Time	Ambient & substrate Temperature	foot traffic	light traffic	full cure
	50 °F (10 °C)	~ 36 hours	~ 6 days	~ 10 days
	68 °F (20 °C)	~ 24 hours	~ 4 days	~ 7 days
	86 °F (30 °C)	~ 18 hours	~ 2 days	~ 5 days

Waiting / Recoat Times	Ambient & substrate Temperature	minimum	maximum	
	50 °F (10 °C)	24 hours	3 days	
	68 °F (20 °C)	8 hours	2 days	
	86 °F (30 °C)	6 hours	1 day	

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, Preparation bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application.

Concrete - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open textured

surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. Whenever “shot-blasting” is utilized, be careful to leave concrete with a uniform texture. “Over blasting” will result in reduced coverage rates of the primer and/or subsequent topcoats. The “shot blast” pattern may show through the last coat, known as “tracking”. The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application. For

other substrates, please contact Sika Technical Services.
Priming - Priming for concrete substrate is required. Prime with either Sikagard® 616 or Sikalastic® MT Primer. Allow the primer to cure (varies with temperature and humidity) until tack free before applying subsequent coats. Ensure that the primer is pore-free, pinhole-free and provides uniform and complete coverage over the entire substrate. Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

MIXING

Mix Ratio - 2 : 1 by volume. Pre-mixed each component separately. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin). Mix the combined components for at least 3 minutes using a low speed drill (300–450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful 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. Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

APPLICATION

Pour a thin approximately 6–12 in. wide bead of Sikagard®-600 in the form of a ribbon on the surface and spread the material at a rate of approximately 130 ft² /US gal (3.2 m²/L) with a notched squeegee, flat squeegee, or trowel. Apply as evenly as possible, working from left to right, and then back. Back rolling is typically done with an 18 inch (454 mm) wide short nap, 3/8" (10 mm), solvent-resistant roller cover. Back roll the Sikagard®-600 only to level the squeegee applied material. Over-rolling and late back rolling may cause bubbling and leave roller marks.

LIMITATIONS

Notes on Limitations: Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.).

Substrate Moisture Content: Moisture content of concrete substrate must be ≤ 4 % by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4 % mass (pbw – part by weight) as measured with

Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4 % by mass (pbw part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikalastic® MT Primer or Sikafloor® 81 EpoCem. When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85 %. If values are > 85 % according to ASTM F2170 use Sikalastic® MT Primer or Sikafloor® 81 EpoCem. ASTM F2170 testing is not a substitute for measuring substrate moisture content with a Tramex® CME/CMExpert type concrete moisture meter as described above.

Material Temperature: Precondition material for at least 24 hours between 65 °F to 75 °F (18° to 24°C).

Ambient Temperature: Minimum/Maximum 50/85 °F (10/30 °C).

Substrate Temperature: Minimum/Maximum 50/85 °F (10/30 °C). Substrate temperature must be at least 5 °F (3 °C) above measured Dew Point. Mixing and Application attempted at Material, Ambient and/or Substrate Temperature conditions less than 65 °F (18 °C) will result in a decrease in product workability and slower cure rates.

Relative Ambient Humidity: Maximum ambient humidity 85 % (during application and curing).

Dew Point: Beware of condensation! The substrate must be at least 5 °F (3 °C) 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.

Mixing: Do not hand mix Sikagard® materials.

Mechanically mix only. 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 warranty.

Application: Apply the coating to the prepared substrate which should be pore-free and pinhole free. If necessary, apply an additional coat of a suitable material to ensure the substrate is pore free and pinhole-free and provides uniform and complete coverage over the entire substrate.

- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapor drive.
- Freshly applied material should be protected from dampness, condensation and water for at least 72 h.
- Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. Use of clear UV resistant top coat may not prevent discoloration of underlying coatings.
- Do not apply Sikagard® to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikagard® product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult

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- with design professional prior to use.
- Any aggregate used with Sikagard® systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Use of unvented heaters and certain heat sources (i.e. propane, gas, etc.) may result in defects (e.g. blushing, whitening, debonding, etc.).
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA’s Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and

instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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