

PRODUCT DATA SHEET

Sikalastic®-390

Two-component, solvent-free, aromatic polyurethane waterproofing base coat

PRODUCT DESCRIPTION

Sikalastic®-390 is a two-component, aromatic, chemically cured, elastomeric polyurethane coating intended for use as the waterproofing base coat under Sikalastic®-391 or Sikalastic®-395 intermediate and top coats and under Sikadur® 22 Lo-Mod epoxy wearing surfaces for pedestrian and vehicular traffic bearing applications.

USES

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arenas
- Plaza and rooftop decks
- Balconies

CHARACTERISTICS / ADVANTAGES

- Low odor and fast turnaround
- Excellent crack-bridging properties and flexibility, even at low temperatures
- Impervious to water and deicing salts

PRODUCT INFORMATION

Packaging	5 gal. two component kit, 3.33 gal. comp. A, 1.67 gal. comp. B.	
Appearance / Color	Brown	
Shelf Life	12 months in original, unopened containers	
Storage Conditions	Store dry at 41–95 °F (5–35 °C). Condition material to 65–85 °F (18–30 °C) before using.	
Solid content by volume	100 %	(ASTM D-2697)
Volatile organic compound (VOC) content	< 10 g/l	(ASTM D-2369-81)

TECHNICAL INFORMATION

Shore A Hardness	80 +/- 5	(ASTM D-2240) 73 °F (23 °C) 50 % R.H.
Abrasion Resistance	6 mg loss	(ASTM D-4060) Taber Abraser, CS-17 Wheel: 1000 g (2.2 lb)/1000 cycles
Tensile Strength	1,320 psi	(ASTM D-412) 73 °F (23 °C) 50 % R.H.
Elongation at Break	435 %	(ASTM D-412) 73 °F (23 °C) 50 % R.H.
Tear Strength	218 pli	(Die C, ASTM D-624) 73 °F (23 °C) 50 % R.H.
Chemical Resistance	Resistant to de-icing salts.	

APPLICATION INFORMATION

Coverage	80 f ² /gal. at 20 wet mils (20 dry mils) NOTE: Surface texture and porosity can affect coverage rate.
Pot Life	15–20 minutes

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface must be clean, dry and sound with an open texture. Remove dust, laitance, grease, curing compounds, 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 and contaminant free, open textured surface by blast cleaning or equivalent mechanical means (CSP 3-4 per ICRI guidelines).

Plywood - Should be clean and smooth, APA and exterior grade, not less than 1/2" thick, and spaced and supported according to APA guidelines. Joints should be sealed with Sikaflex® 2c or 1a and detailed and may need embedded fabric reinforcement.

Metal - Should be thoroughly cleaned by grinding or blast cleaning.

Priming

Primer Selection - Determine maximum moisture content of concrete substrate by weight with a Tramex CME or CMExpert type concrete moisture meter. NOTE: For new plywood decks, a primer is not required.

Sikalastic® Primer – For concrete decks with a maximum moisture content of 4 % by weight, apply Sikalastic® Primer with a flat squeegee or phenolic resin core roller at approximately 250 - 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information. Sikalastic Primer can be used as *recoat primer* for all *Sikalastic 300 series products and systems*.

Sikalastic® FTP Primer – For concrete decks with a maximum moisture content of 4 % by weight, and for weathered plywood decks, apply Sikalastic® FTP Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® FTP Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® PF Lo-VOC Primer - For concrete and plywood decks with a porous or rough surface, and for metal flanges and penetrations, use Sikalastic® PF Lo-VOC Primer. For exterior exposed concrete decks with a maximum moisture content of 4 % by weight, interior protected concrete decks with a maximum moisture content of 5 % by weight, and plywood decks, apply Sikalastic® PF Lo-VOC Primer with a flat squeegee or phenolic resin core roller at approximately 200 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. For

exterior exposed concrete decks with a maximum moisture content of 5 % by weight, two applications of Sikalastic® PF Lo-VOC Primer are required. Refer to separate primer data sheet for additional information.

Sikalastic® FTP LoVOC Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® FTP LoVOC Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® FTP LoVOC Primer with a flat squeegee or phenolic resin roller at approximately 175 - 220 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® MT Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® MT Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® MT Primer with a flat squeegee or phenolic resin roller at approximately 175 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® Recoat Primer – For existing polyurethane coatings, incidental exposed concrete deck areas, and as an interlaminar primer, apply Sikalastic® Recoat Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work will into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Recoat Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Detailing

Non-structural cracks up to 1/16" - Apply a detail coat of Sikalastic®-390 at 20 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

Cracks and joints over 1/16" up to 1 inch - Rout and seal with Sikaflex® sealant and allow to cure. Apply a detail coat of Sikalastic®-390 at 20 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

Joints over 1 inch - Should be treated as expansion joints and brought up through the Sikalastic®-390 waterproofing membrane and sealed with Sikaflex® sealant.

Fabric Reinforcement – An optional 3" or 6" wide Sikalastic Flexitape Heavy fabric strip may be embedded within the base coat. Flexitape width shall be chosen such that a minimum of 1" tape is embedded on either side of the crack/joint. Apply additional coating as required to fully embed the Flexitape in the coating.

Panelized Joints - Panelized joints that are restrained across the joint and without differential movement may be sealed and the deck coating, including detail coat, applied over the joint.

NOTE: movement within panelized joints may cause deterioration of the aggregated wear coat, in which case the joints should be treated as expansion joints and brought up through the Sikalastic Traffic System and sealed with Sikaflex® sealant. For additional questions please contact Sika Technical Services.

Expansion Joints - Should be extended through System .

MIXING

Premix Part A and Part B components using a slow speed (400–600 rpm) drill and mechanical mixer (Jiffy) to obtain uniform color, making sure to scrape the solids from the bottom and sides of the pail. Pour part B into Part A slowly and while mixing scrape the side of the container. Mix the combined material thoroughly until a homogenous mixture and uniform color is obtained (typically 3 minutes). Use care not to allow the entrapment of air into the mixture.

APPLICATION

Apply at the recommended coverage rate (see appropriate System Guide) using a 3/16" notched squeegee or trowel, and back roll using a phenolic resin core roller. Extend base coat over entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 5–6 hours at 70 °F and 50 % R.H.; base coat must be tack free before over coating.

Removal

Remove liquid coating immediately with dry cloth. Once cured, coating can only be removed by mechanical means.

LIMITATIONS

- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Maximum moisture content of concrete substrate by weight when measured with a Tramex CME or CMExpert type concrete moisture meter: 4 % for

primed applications; 5 % with one application of Sikalastic® MT Primer, Sikalastic® FTP LoVOC Primer ; 6 % with two applications of Sikalastic® MT Primer or Sikalastic® FTP LoVOC Primer (see separate product data sheets).

- Coating materials will become more viscous at lower application temperatures and be more difficult to spread, which may affect yield.
- Minimum ambient and substrate temperature during application and curing of material is 41 °F (5 °C); maximum is 90 °F (32 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying polyurethane coatings. Note that low temperatures and low humidity will slow down the cure, and high temperatures and high humidity will accelerate it.
- Do not store materials outdoors exposed to sunlight for prolonged periods.
- Do not thin with solvents.
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various Sika product solutions). Surface irregularities may reflect through the cured system.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather as there is the potential for bonding problems.
- When applying over existing coatings compatibility and adhesion testing is recommended.
- On grade, lightweight concrete, asphalt pavement, or insulated split slab applications, or applications where chained or studded tires may be used should not be coated with Sikalastic® Traffic Systems.
- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation to determine substrate moisture content, which must be less than 6 % by weight when measured with a Tramex Concrete Moisture Encounter Meter, and priming with a moisture-tolerant primer such as Sikalastic® MT primer.
- Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and/or

vapors into the building/structure during product application and cure.

- Do not subject to continuous immersion or ponding water.
- Sikalastic®-390 is not UV stable and must be top coated or protected by a separate wearing course.
- Primer and base coats must be kept clean and re coated within 48 hours. If this window is exceeded, contact Sika for recommendations.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.
- Cracks or ruptures which develop in the structure after the waterproofing traffic system has been installed will not be bridged by the waterproofing traffic system and need to be repaired according to the recommended standard crack treatment details per this PDS.

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.

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