BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic® M 270 NP

(formerly MSeal M 270NP or MSeal M 265)

POLYURETHANE BASE COAT FOR SIKALASTIC® TRAFFIC 2500, 2530, 2575 AND 2850 DECK COATING SYSTEMS

PRODUCT DESCRIPTION

Sikalastic® M 270 NP is a two-component polyurethane base coat for use in Sikalastic® Traffic 2500, 2530, 2575 and 2850 deck coating systems.

Sikalastic® M 270 NP is a fast-curing base coat with outstanding mechanical properties, including excellent elongation without the use of primer.

CHARACTERISTICS / ADVANTAGES

- Primerless base coat provides a simpler application process and material and labor cost savings
- Two-component base coat provides faster setting times, even in cooler climates
- Seamless waterproof membrane helps protect concrete from freeze/thaw damage
- Can be used with or without a primer

USES

- Stadiums
- Balconies
- Parking Garages
- Commercial Construction
- Building and Restoration
- Plywood Decks/Balconies
- Plaza Decks

PRODUCT INFORMATION

Chemical Base	Aromatic Polyurethane
Packaging	4.66 gallon (17.64 L) pails
Color	part B Light Gray, part A clear/amber, Mixed - Light Gray
Shelf Life	1 year in original, unopened containers
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using
Viscosity	3,400 cps* *Cold temperatures will increase viscosity.

Solid content by volume	99%

TECHNICAL INFORMATION

Testing	67	(ASTM D 2240)
Tensile Strength	3,000 psi (20.7 MPa)	(ASTM D 412)
Elongation at Break	950%	(ASTM D 412)
Crack Bridging Ability	Passed, No cracking	ASTM C 957
Adhesion in peel	400 psi	ASTM D 4541

APPLICATION INFORMATION

Coverage	55-60 ft²/gal. at 25 wet mils (25 dry mils) NOTE: Coverage rates provided are optimal and are not guaranteed. Coverage rates will vary depending on temperature, surface roughness and porosity, and application technique.
Pot Life	20 min at 70 ˚F and 50% RH
Cure Time	3–4 hours at 73 °F (23 °C) and 50% R.H .

SYSTEM INFORMATION

Systems	Sikalastic® Pedestrian 2500 Sikalastic® Vehicular 2500 Sikalastic® Vehicular 2530 Sikalastic® Vehicular 2575 Sikalastic® Vehicular 2850

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.

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 is 4% when used without primer.
- If using primer, maximum moisture content of concrete substrate: 4 % by weight with Sikalastic® Primer, Sikadur 22 LM FS, and when 6 % or less by weight with Sikalastic® FTP LoVOC Primer, Sikalastic ® 100 VB Primer. See separate primer data sheet prior to application.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °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, and applications where chained or studded tires may be used should not be coated with Sikalastic® traffic systems- contact Sika regarding recommendations.

- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation and priming with a moisture-blocking primer - contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, asphalt pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion or ponding water.
- Sikalastic® M 270 NP is not UV stable and must be top coated or protected by a separate wearing course.
- Sikalastic® M 270 NP must be kept clean and recoated within 24 hours. If this window is exceeded, contact Sika for recommendations.
- Mockups are highly recommended to verify application methods, substrate conditions, desired skid resistance, and aesthetics.
- 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.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Concrete

Concrete must be fully cured (28 days), structurally sound, clean, and dry (ASTM D 4263). All concrete surfaces (new and old) must be shot blasted to remove previous coatings, laitance, and all miscellaneous surface contamination and to provide profile for proper adhesion. Abrasive shot blasting must occur after concrete repair has taken place. Acid-etching is not permitted. Proper profile should be a minimum of ICRI CSP-3 (as described in ICRI document 03732.) For balconies and other pedestrian areas with limited space or access for shot-blasting, alternative mechanical methods can be used to achieve the recommended surface profile.

Plywood

All plywood must be smooth-faced, APA-stamped, and exterior-grade tongue and groove plywood.
Construction must conform to code, but plywood must not be less than 23⁄32" (18 mm) thick. Plywood spacing and deck construction must follow APA guidelines.
Surfaces must be free of contaminants. Priming is not necessary on new, clean, & dry plywood.
All seams must be caulked with Sikaflex sealants.
Prestripe 4–6" (102 152 mm) wide with 25 wet mils (0.6 mm) of Base Coat. Reinforce all seams between plywood sheets and between flashing and the plywood deck by embedding fabric reinforcement into the pre-striping.

Metal

Metal must be in sound condition. The surface should be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Be aware of dew point and check it before every application on metal surface. Priming is required for all metal substrates.

- **Ferrous Metals**: Must be prepared to SSPC-SP6/NACE 3. For areas where SSPC-SP6/NACE 3 is prohibited or not feasible, substrate can be thoroughly cleaned by grinding or other power tools per SSPC-SP11.
- **Non-Ferrous Metals:** Prepare to a bright metal surface. Wire brushing can be used for soft metals such as copper or lead.
- **Galvanized Steel:** White rust must be removed from galvanized steel, with care taken not to damage or remove the galvanizing.
- **Stainless Steel:** Must be mechanically abraded or ground to create an appropriate anchor profile.

Existing Coatings

Should be cleaned and mechanically abraded to provide a contaminant-free, open-textured surface. Followed by a solvent wipe or mop as allowed by state and local regulations. After solvent flashes off proceed with approved primer for existing coating.

PRIMING

Sikalastic® M 270 NP does not require primer on direct application to concrete with moisture content below 4% via Tramex and new plywood substrates, other substrates may require primer.
Sikadur®-22 Lo-Mod FS - For concrete with a maximum moisture content of 4 % by weight, plywood decks, aluminum, steel and existing polyurethane coatings, apply a single coat application of Sikadur®-22 Lo-Mod FS with a flat squeegee or roller at approximately 10 mils at 160 sf/gal. Apply evenly without puddling. Allow primer to cure until tack-free, typically 2-4 hours (at 75°F (24°C) 50 % R. H). Sikadur®-22 Lo-Mod FS should be overcoated within 36 hours after tack-free. Refer to a separate product data sheet for additional information.
Sikalastic® EP Primer/Sealer - For Wood (timber, plywood) and Metal (aluminum, galvanized, cast iron, copper, lead, brass, stainless steel, steel, zinc). Apply by brush or phenolic resin core roller at the recommended rate,100-250 sf/gal depending on the substrate. Correct amount of primer will saturate the substrate and leave a slight film on the substrate top surface. Apply evenly without puddling. Refer to separate primer data sheet for additional information.

Sikalastic® Primer - For concrete decks with a maximum moisture content of 4 % by weight, plywood decks, and existing polyurethane coatings, 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. Refer to separate primer data sheet for additional information.
Sikalastic® 100 VB - For concrete with a maximum moisture content of 5 % by weight, apply Sikalastic® 100 VB with a flat squeegee or roller at approximately 160 sf/gal. For concrete decks with a maximum moisture content of 6% by weight or applications, apply two applications of Sikalastic® 100VB with a flat squeegee or phenolic resin roller at approximately 160 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing and puddles are avoided. For applications as a moisture barrier and additional information refer to separate primer data sheet.

DETAILING

For cracks less than 1/16" width: Apply a 25 mil detail coat of Sikalastic® M 270 NP, extending 2" on either side and centered over the crack.

For cracks 1/16" width or greater and less than 1" width: Must be routed to at least ¼" by ¼", and sealed with an appropriate Sikaflex® sealant, installed per sealant Product Data Sheet, and coated with a 25 mil detail coat of Sikalastic® M 270 NP, extending 2" on either side and centered over the crack. Non-moving cracks can be filled with compatible rigid repair materials.

NOTE: Cracks may indicate a structural issue and should be addressed by a structural engineer or appropriate design professional.

For joints 1/16" or greater and up to 1" width: Joints should be sealed with the appropriate Sikaflex® sealant, installed per sealant Product Data Sheet, and coated with a 25 mil detail coat of Sikalastic® M 270 NP, extending 2" on either side and centered over the crack.
For joints greater than 1" width: Should be treated as expansion joints and brought up through the system and/or use Emseal Expansion Joint. For additional questions please contact Sika Technical Services.

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.

MIXING

- Precondition both A and B components to a temperature of approximately 70 °F (21 °C).
- Add entire contents of Part A into Part B. Mix components with a slow-speed drill (400–600) rpm, for a minimum of 3 minutes.
- Scrape down sides and bottom of mixing vessel, then mix again for 2 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.

APPLICATION

Apply Sikalastic® M 270 NP using a properly notched squeegee and immediately back roll. Extend base coat over entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 3–4 hours at 70 °F and 50 % R.H. before top coating.

Please see the applicable Sikalastic® Deck Coating system data sheet for total system and aggregate surface preparation and application.

Sikalastic® M 270 NP is applied without primer but also can be used with primer applications per system application instructions.

Removal

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

LEGAL DISCLAIMER

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

• **FOR PROFESSIONAL USE ONLY**

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