BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-7600 HG

TWO COMPONENT POLYURETHANE, HORIZONTAL GRADE, BITUMEN MODIFIED WATERPROOFING MEMBRANE

PRODUCT DESCRIPTION

Sikagard®-7600 HG is a two-component, horizontal grade, liquid applied, asphalt extended polyurethane waterproofing membrane/coating system.

USES

- Waterproofing
- Tank Liner
- Pond Liner
- Cooling Tower liner
- Potable Water Containment
- Reservoirs
- Planters
- Plaza/Pool Decks with Vegetation
- Hybrid Traffic system base coat over asphaltic surfaces

CHARACTERISTICS / ADVANTAGES

- Flexible system that bridges cracks and joints
- Handles full water immersion conditions
- Impervious to water and aqueous chemicals
- Abrasion Resistant
- UV Stable

APPROVALS / STANDARDS

- Meets California VOC and AQMD Requirements, Including SCAQMD Areas
- ANSI / NSF 61 Approved for contact with Potable Water
- Complies with LADBS AC-L021: Acceptance Criteria for Below-Grade Exterior Damp-Proofing and Waterproofing Materials requirements for materials that are unexposed, unreinforced sheet membrane barrier.
- City of Los Angeles Research Report: 26199

PRODUCT INFORMATION

Packaging	**18 gal. kit -** 4 x 4.5 gal. pail A+B **3 gal. kit-** 3 x 1 gal. pail A+B
Shelf Life	12 months from date of manufacture in original, factory-sealed containers.
Storage Conditions	Store indoors at a temperature between 60–95 °F (15–35 °C)
Appearance / Color	**Component A** Transparent **Component B** Black
Density	**comp. B:** 8 lbs/gal **comp. A:** 10.1 lbs/gal **Mixed & Cured:** 8.3 lbs/gal

Solid content by mass	95 ± 2 %	(ASTM D-236)
Solid content by volume	89 ± 2 %	(ASTM D-2697)
Volatile organic compound (VOC) content	See Product Safety Data Sheet	

TECHNICAL INFORMATION

Elongation at Break	450 % ± 50 %	(ASTM D-412) 75 °F (24 °C) 50 % R.H.
Service Temperature	-60–220 °F	
Water Vapor Transmission	0.03 Perms	(ASTM E-96, Procedure B - Wet Cup) 75 °F (24 °C) 50 % R.H.
Chemical Resistance	Resistance to aqueous chemicals and waste water. Please see chemical resistance chart.	
Resistance to Weathering	done for > 5000 hrs	(ASTM D-822) 75 °F (24 °C) 50 % R.H.
Behavior after Artificial Weathering	Weathering (ASTM D822) done for > 5000 hrs Tensile Strength (ASTM D-412) ..... 1000 psi ± 50 psi 5.86 Mpa ± 0.3 Mpa Tear Strength (Die C, ASTM D-624) .....180 ± 50 psi Hardness (ASTM D-2240) ..... 60 ± 5 Shore A Adhesion to Concrete (dry) Elcometer ..... 350 psi Abrasion Resistance - Weight Loss (ASTM D4060) ..... 1.2 mg loss Deflection Temperature (ASTM D648) .....pass Elastomeric Waterproofing (ASTM C836) .....exceeds (ASTM C957) ..... exceeds Extension to Break (ASTM D2859) ..... 450 ± 100 Liner Performance Crack Bridging ..... 10 cycles @ - 15°F > 1/8"; After heat aging > 1/4" Liner Weight (60 mil wet film thickness) .....30 lbs/100 sq.ft Mullen Burst Strength (ASTM D751)..... 50 mil 155 psi Recovery from 100% Extension after 5 minutes ..... 98% after 24 hours .....100% Softening Point, Ring & Ball (ASTM D36) ..... >400°F Deflection Temperature (ASTM D648) ..... -60°F	

APPLICATION INFORMATION

Coverage	48 ft²/gal results in 30 ± mils DFT (standard per 1 coat) 24 ft²/gal results in 60 ± mils DFT 16 ft²/gal results in 90 ± mils DFT 12 ft²/gal results in 120 ± mils DFT
Pot Life	30 minutes (at 70°F, 50% R.H) (Do not work directly from pail, pot life will be significantly reduced)

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

- **On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature. If applied during rising temperature pin holing may occur.**
- **Do not apply when substrate is in direct sunlight.**
- Surfaces must be dry, clean and free of foreign matter.
- Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications.
- Surface may be slippery when wet.
- Containers that have been opened must be used as soon as possible.
- Do not dilute under any circumstance.
- Cured Sikagard®-7600 HG may be placed in service within 24 hours for non-aggressive service and with no potable water.
- Other Sikagard®-7600 HG service applications including immersion in potable water applications may require a cure time of a minimum 96 hours or more. Please contact Sika Technical Service for recommended application.
- This product is available only in black color. Can be exposed to direct sunlight. Initially after application it is shiny black then after a few months it will turn dull after being exposed to direct sunlight.
- Observe the curing time before immersion into and service in potable water. Please see Disinfection and cleaning guide.
- 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.
- Minimum ambient and substrate temperature during application and curing of material is 41 °F (5 °C); maximum is 95 °F (35 °C). Surface temperatures must be no higher than 110 °F (43 °C).
- New concrete must be cured a minimum of 28 days prior to application.
- Do not store materials outdoors exposed to sunlight and moisture for prolonged periods.
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure. This condition should be checked using ASTM D-4263 (Polyethylene Sheet method).
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems.
- Precautions should be taken to prevent vapors and/or odors from entering the building/ structure, including but not limited to turning off and sealing air intake vents and through-wall air conditioners, and other means of vapor/odor ingress during application and cure. Please see Applying within Confined Spaces manual.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions). Surface irregularities may reflect through the cured system.
- When applying over existing coatings or membranes compatibility and adhesion testing, subsequent approval by Technical Services is required.
- Do not thin or batch down the material. Do not mix Sikagard®-7600 HG by hand; mechanically mix only.
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks, and lightweight insulating concrete overlays should not be covered with Sika membrane systems without additional deck evaluation to determine substrate moisture content and subsequent approval by Technical Services.
- If Sikagard®-7600 HG is used as split slab waterproofing membrane or buried membrane cover the final coat of Sikagard®-7600 HG with an approved drainage mat (Sika® Drain 420) or protection board.
- Application over asphalt as traffic coating Base Coat: Please contact Sika Technical Service. Must use Sikalastic Recoat Primer.

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

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 application.

Concrete - New concrete must be cured a minimum of 28 days prior to application. Old concrete must be free of loose aggregate, dirt and be dry. New and old concrete should be Shot-, Water- or Abrasive-blasted. Grease spots and oil should be chemically cleaned with appropriate cleaners or mechanically removed .

Asphalt - New asphalt must be cured a minimum of 28 days prior to application. Old asphalt must be free of loose aggregate, dirt and must be dry. New and old asphalt should be Shot-, Water- or Abrasive-blasted. Lower ambient temperature will help to make cleaning process more effective. Grease spots and oil must be cleaned with appropriate cleaners or mechanically removed.

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.

- **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 metal 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.
- **Immersion Service:** Must be prepared to a near white metal finish per SSPC-SP10/NACE 2.

Plywood - The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded.

Priming: To promote adhesion and minimize outgassing, priming is recommended on all surfaces except for new plywood. New plywood priming is optional.

- **Concrete, Old Plywood** - Sikadur® 22 Lo-Mod FS, Sikalastic® FTP Lo-VOC Primer, Sikalastic® EP Primer/Sealer
- **Metal** - Sikalastic® PF Lo-VOC Primer, Sikalastic® EP Primer/Sealer
- **Asphalt** - Sikalastic® Recoat Primer, Sikalastic® EP Primer/Sealer

APPLICATION

Mixing

It is essential that proper mixing methods and tools are used to ensure proper application of Sikagard®-7600 HG.

- **Mixing Drill:** Low Speed Mixing Drill (400-600 rpm)
- **Mixing Paddle:** Jiffy Mixer (5-50 Gallon Model) or Mud Mixing Paddle (9-5/8" WIDE x 6-1/4" DEEP)
- **Premixing:** Premix each pail of Sikagard®-7600 HG Part-B (4.05 gal.) using the recommended drill and mixing paddle at slow speed for a minimum of 1.5 minutes to ensure Sikagard®-7600 HG Part B is a homogeneous mixture.
- **Mixing A & B component:** With mixing paddle in the Part-B, turn on mixing drill and begin mixing Sikagard®-7600 HG Part B, and while the mixing paddle is spinning slowly add one 0.45 gallon can of Sikagard®-7600 HG Part-A to the center of the vortex created by the mixing paddle. Once Part-A has been added, mix continuously for an additional 3 minutes using a very slow up and down motion, making sure full pail is mixed evenly, including the sides of the pail.
- **NOTE:** Take care not to allow entrapment of air into the material. Do not mix in an aggressive up and down motion. Do not estimate mixing time. Do not thin. Do not hand mix. Mix the whole pail. Do not batch down. If a greenish hue can be seen at the top of the pail then product has not been mixed properly.

Top: Jiffy Style Paddle **Bottom**: Mud Mixing Paddle

Priming:
When primer is required use the following coverages for concrete; Sikalastic® FTP LoVOC primer at 200 sq. ft/gal or Sikadur® 22 Lo-Mod FS at 160 sq. ft/gal. Apply using a brush or phenolic core roller. This will result in 8-10 dry mils of primer. Don't prime over an existing crack and joint detail coats. For primer application over asphalt contact Sika Technical Services for recommendation. Due to age and porosity of asphalt coverage rates can change drastically.
NOTE: For rough or porous concrete or when outgassing is a concern, use Sikadur® 22 Lo-Mod FS, Sikalastic FTP LoVOC or Sikalastic® PF LoVOC Primer at an approximate rate of 160 - 210 sq.ft/gal. This rate may vary on the porosity of the substrate. The surface must be totally covered with primer with no dry spots or spots where the primer has completely absorbed into the substrate. Allow primer to become tack free before proceeding to the next phase.
Detailing:
Non-structural cracks less than 1/16"- Apply a detail coat of Sikagard®-7600 HG at 30 WFT, 3" wide, centered over the crack. Allow detail coat to become tack-free before overcoating.
Crack and joints greater than 1/16" up to 1" - Rout (min 1/4" W x 1/4" D) and Seal crack with Sikaflex sealant and allow to cure sufficently before overcoating. Then apply a detail coat of Sikagard®-7600 HG at 30 WFT, 3 " wide, centered over the crack or joint. Allow detail coat to become tack-free before overcoating.
Joints greater than 1" - Should be treated as an expansion and be honored up through the Sikagard®-7600 HG membrane.
Fabric reinforcement - Sika does not require reinforcing of the detail coat when going over cracks and joints. In situations where reinforcing detail coats is required, then the width of the detail coat must be increased to 4" and use a 3" wide strip of Sika Flexitape Heavy as the reinforcing. Please see the Sika Flexitape Heavy product data sheet for installation instructions.
Application:
Sikagard®-7600 HG can be applied at different thicknesses to accommodate different application and warranty requirements. For best results Sikagard®-7600 HG should be applied in two coats. Please follow the coverage rate section above to determine proper coverage for 30, 60, 90 mil coating layers. Allow to cure (4-6 hours or until surface is walkable without damaging the membrane) after initial coat and before proceeding.Sikagard® 7600 HG should be applied in the shade or during evening hours. When applying in direct

sunlight it is possible that the surface of the coating can cure too quickly and entrap solvent resulting in blisters. Sikagard®-7600 HG can be applied over both horizontal and vertical surface. Apply using a 3/8" nap roller or notched squeegee and back-roll . Please note that pot life for Sikagard®-7600 HG is only 30 minutes. Sikagard®-7600 HG can be applied on horizontal surfaces up to 120 mils and on vertical surfaces up to 45 mils.

Recoat:

After application at 75 °F (24 °C) and 50 % R.H, second or multiple coats must be completed within 16 hours from the start of the previous applications of Sikagard®-7600 HG. If a rain event occurs during the 16 hour window or the 16 hour window is missed and does not go beyond 72 hours or get covered with significant dirt or other contamination, it is necessary to solvent wipe with xylene, acetone or other approved solvent, and prime with Sikalastic Recoat Primer. Once beyond 72 hours from the start of the previous applications of Sikagard®-7600 HG, it is necessary to clean, abrade, solvent wipe with xylene, acetone or other approved solvent, and prime with Sikalastic Recoat Primer.

OTHER RESTRICTIONS

See Legal Disclaimer.

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.

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