PRODUCT DATA SHEET

Sikagard®-7600 VG

TWO-COMPONENT POLYURETHANE, TROWEL GRADE, BITUMEN MODIFIED WATERPROOFING MEMBRANE

PRODUCT DESCRIPTION

Sikagard® 7600 is a two-component, liquid applied, asphalt extended polyurethane sealer used in a waterproofing membrane system. The system is available in 2 grades. Sikagard® 7600 VG - trowel grade can be used for vertical and overhead applications.

USES

- Waterproofing
- Tank Liner
- Pond Liner
- Cooling Tower liner
- Potable Water Containment
- Reservoirs
- Traffic system base coat over asphalt surface

CHARACTERISTICS / ADVANTAGES

- Economical and easy to apply system
- Seamless system which bridges cracks and joints
- 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

PRODUCT INFORMATION

Packaging

Component A - 0.45 gal. pail
Component B - 4.05 gal. pail

1 Unit 4 x 4.5 gal. pail A+B

Appearance / Color

Component A: Transparent
Component B: Black

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)

Density

comp. B: 8 lbs/gal
comp. A: 10.1 lbs/gal
Mixed & Cured: 8.3 lbs/gal

Solid content by weight

95 ± 2 % (ASTM D-236)
Solid content by volume \(89 \pm 2\%\) (ASTM D-2697)

Volatile organic compound (VOC) content 78 g/L (ASTM D-2369-81)

**TECHNICAL INFORMATION**

**Elongation at Break** 450 % ± 50 % (ASTM D-412)

**Chemical Resistance** Resistance to aqueous chemicals and waste water. Please see chemical resistance chart.

**Resistance to Weathering** done for > 5000 h (ASTM D-822)

**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 pli
- 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.f.
- Mullen Burst Strength (ASTM D751) .................. 50 mil 155 psi
- Recovery from 100% Extention after 5 minutes .... 98%
  after 24 hours ..........100%
- Softening Point, Ring & Ball (ASTM D36) ............. >400°F
- Deflection Temperature (ASTM D648) ............... >-60°F

**Permeability to Water Vapor** 0.03 perms (ASTM D-751)

**Service Temperature** -60–220 °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** 20 minutes (standard ambient conditions 70 F°, 50% humidity)

**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 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 should be cleaned with appropriate cleaners or mechanically removed.

**Metal** - Should be thoroughly cleaned by grinding or blast cleaning. Be aware of dew point and check it before every application on metal surface.

**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 advised on all surfaces except for new plywood. New plywood priming is optional.  
- **Concrete, Old Plywood** - Sikalastic® PF Lo-VOC Primer, Sikalastic® FTP Lo-VOC Primer, Sikalastic® MT Primer  
- **Metal** - Sikalastic® PF Lo-VOC Primer, Sikalastic® EP Primer  
- **Asphalt** - Sikalastic® Recoat Primer, Sikalastic® EP Primer

**APPLICATION**

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

- **Mixing Drill:** Mechanical Mixer (400-600 rpm)  
- **Mixing Paddles:** Jiffy Style Paddle (5-50 Gallon Model) or Mud Mixing Paddle (9-5/8" WIDE x 6-1/4" DEEP)  
- **Premixing:** Premix each pail of Sikagard®-7600 VG Part-B (4.05 gal.) by using a mechanical mixer with a jiffy style paddle or a mud mixing paddle at slow speed for a minimum of 1.5 minutes to ensure Sikagard®-7600 VG Part B is a homogeneous mixture in pail.
- **Mixing A & B component:** After premixing continue to mix Sikagard®-7600 VG Part B, slowly add one 0.45 gallon pail of Sikagard®-7600 VG Part-A to the vortex created while mixing Sikagard®-7600 VG Part B. Once Part-A has been added, mix continuously for 3 minutes.  
- Take care not to allow entrainment of air into the material. Ensure mixed evenly including sides of pail. Do not mix in an aggressive up and down motion. Do not estimate mixing time to avoid any errors. Do not thin. Do not hand mix. Mix the whole pail. Do not batch down.
Phase 1 (Primer): When required; prime the surface at the rate of 1 gal / 200 - 300 sq.ft. . Apply using a brush or phenolic core roller. This will result in 5 - 7 dry mils of coating. Priming is optional. Don’t prime over an existing detail coat.

NOTE: For rough or porous concrete or when outgassing is a concern, use Sikalastic® PF Lo-VOC Primer or Sikalastic FTP LoVOC Primer at an approximate rate of 180 - 230 sq.ft./1 gal. This rate may vary on the porosity of the substrate. Allow primer to become tack free before proceeding to the next phase.

Phase 2 (Cracks, Joints, Detailing): Detail Coat: Apply 30 mils of detail coat Sikagard® 7600 over all joints, transitions, cracks and flashing. Cracks in concrete/asphalt over 1/8” must be filled with Sikagard® 7600. Using Sikagard® 7600 as caulking compound will shorten the curing time over conventional polyurethane caulks.

Reinforced Detail Coat: Apply 15 mils of detail coat Sikagard® 7600 over all joints, cracks and flashing. Cracks in concrete/asphalt over 1/8” must be filled with Sikagard® 7600. Bridge joints, cracks, and flashings with 3” or 6” FlexiTape Heavy pushing it into the Sikagard® 7600 over all joints, cracks and flashings. Over reinforcement tape, apply 10–15 mils stripe coat of Sikagard® 7600 and taper it onto adjacent surface. Allow the surface to cure for 4–6 hours before proceeding to the next phase.

Phase 3 (Coat #1): The first coat of Sikagard® 7600 VG should be applied at the rate of 48 - 24 sq.ft./1 gal. resulting in 30 - 60 dry mils of membrane. Allow to cure (4-6 hours) before proceeding to Phase 4.

Phase 4 (Coat #2): Apply the second coat of Sikagard® 7600 VG at the rate of 48 - 24 sq.ft./1gal. resulting in 30 - 60 dry mils of membrane.

NOTE: If priming is not required skip Phase 1, and proceed with Phase 2. Any adhesion test is to be performed 3 days after product application.

Sikagard 7600 VG can be applied over vertical and overhead surface. Apply using a trowel. Please note that potlife for SG 7600 VG is only 20 minutes.

Recoat: At 75 °F (24 °C) and 50 % relative humidity, recoating and multiple or second coats must be completed within 16 hours of previous applications of Sikagard® 7600 VG. After this 16 hour window, it is necessary to abrade, clean and prime surface prior to recoating.

Reinforcement: please contact Sika Technical Service (polyester scrim is optional).

Removal: Equipment should be immediately cleaned with an environmentally safe solvent, as permitted under local regulations.

LIMITATIONS
- 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 VG may be placed in service within 24 hours for non-aggressive service and no potable water. Other service 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 than after few months it will turn dull after being exposed to direct sunlight.
- Observe the curing time before immersion into into and service in potable water. Please see Desinfection 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 curing. 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.
- 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.
- 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 part mix the material. Do not mix Sikagard® 7600 VG 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® VG is used as split slab waterproofing membrane or buried membrane cover the final coat of Sikagard 7600® with an approved drainage mat (Sika® Drain 420) or protection board.
- Application over asphalt as traffic coating Base Coat: Please contact Sika Technical Service. Always use Recoat primer.

**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.

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