BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-641 Lo-VOC

Single component low-VOC, low odor saturating resin for Sikalastic® RoofPro roofing and waterproofing systems

PRODUCT DESCRIPTION

Sikalastic®-641 Lo-VOC is a cold applied, highly elastic, aliphatic, single component, low-odor, low-VOC moisture-triggered polyurethane resin designed for easy application as part of Sikalastic® RoofPro roofing/waterproofing systems.

USES

- Embedment and top coat resin for Sikalastic® RoofPro systems reinforced with Sika Reemat
- Saturating resin for Sikalastic® RoofPro systems reinforced with Sika Fleece
- Typically applied in Sikalastic® RoofPro, Direct, Plaza, Vegetated, and Recover systems for both new construction and refurbishment

CHARACTERISTICS / ADVANTAGES

- Proven technology with over 30 year track record
- Single component - no mixing and ready to use
- Fully reinforced with highly conformable Sika Reemat or Sika Fleece
- Moisture triggered chemistry that is rapidly weatherproof after application
- Resistant to ponding water
- Low VOC formula - low Odor
- Highly elastic and crack bridging
- Seamless and fully adhered
- Vapor permeable
- UV resistant and non-yellowing
- Abrasion and chemical resistant
- Adheres to most common construction materials when suitable primer is used

ENVIRONMENTAL INFORMATION

Environmental Product Declaration (EPD) - Cradle-to-Grave

APPROVALS / STANDARDS

- FM Approval Standard 4470 for Class 1 Roof Covers
- UL 790 Class A
- Miami-Dade
- ASTM D 6083
- ASTM C 836
- Florida Building Code

PRODUCT INFORMATION

Chemical Base	Single component, moisture triggered aliphatic Polyurethane	
Packaging	5 gal. (19 L) pail	
Shelf Life	15 months	
Storage Conditions	Store dry between 35 °F and 77 °F (2–25 °C). Condition material to 50–77 °F (10–25 °C) before using for ease of application	
Color	White, Standard Gray, Pearl Gray, Steel Gray, Mushroom, Copper Green; Custom Colors Available	
Density	11.9 lb./gal. (1.4 kg/cm³)	
Solid content by volume	89 %	(ASTM D-2697)
Volatile organic compound (VOC) content	38 g/l	(ASTM D-2369-81)

TECHNICAL INFORMATION

Resistance to Static Puncture	Refer to Sikalastic®-641 Lo-VOC System Data Sheet		(ASTM D-751))
Tensile Strength	Refer to Sikalastic®-641 Lo-VOC System Data Sheet		(ASTM D-751)
Elongation at Break	Refer to Sikalastic®-641 Lo-VOC System Data Sheet		(ASTM D-751)
Tear Strength	Refer to Sikalastic®-641 Lo-VOC System Data Sheet		(ASTM D-751)
Solar Reflectance	86.8 % 57.6 % 37.5 % 12.0 % 56.5 %	(ASTM C-1549)	(White) (Pearl Gray) (Standard Gray) (Steel Gray) (Mushroom)
Thermal Emittance	0.90 0.91 0.91 0.91 0.91	(ASTM C-1371)	(White) (Pearl Gray) (Standard Gray) (Steel Gray) (Mushroom)
Solar Reflectance Index	108	(ASTM E-1980)	(White)
Service Temperature	-22–176 °F (-30–80 °C) intermittent		
Chemical Resistance	Strong resistance to a wide range of reagents, including paraffin, gasoline, fuel, oil, white spirit, acid rain, detergents and moderate solutions of acids and alkalis. Some low molecular weight alcohols can soften the material. Contact Technical Service for specific recommendations.		
External Fire Performance	Class A		(ASTM E 108)

APPLICATION INFORMATION

Coverage

Sika Reemat	Sika Fleece
80 sf/gal - 20 mils wet film thickness	24 sf/gal - 66 mils wet film thickness
69 sf/gal - 23 mils wet film thickness	32 sf/gal - 50 mils wet film thickness
53 sf/gal - 30 mils wet film thickness	35 sf/gal - 45 mils wet film thickness
32 sf/gal - 50 mils wet film thickness	53 sf/gal - 30 mils wet film thickness

NOTE: Coverage rates provided are optimal and are not guaranteed - coverage rates will vary depending on temperature, surface roughness and porosity, aggregate selection and embedment, and application technique. (Refer to Sikalastic® 641 Lo-VOC System Data Sheet)

Ambient Air Temperature

41 °F (5 °C) min. / 95 °F (35 °C) max.

Relative Air Humidity

85 % R.H. max.

Dew Point

Beware of condensation.
The substrate and uncured coating must be ≥ 5 °F (3 °C) above dew point.

Substrate Temperature

41 °F (5 °C) min. / 140°F (60°C) max.

Substrate Moisture Content

≤ 4 % moisture content Test method: Sika®-Tramex meter
No rising moisture according to ASTM (Polyethylene-sheet)

Pot Life

Sikalastic®-641 Lo-VOC is designed for fast curing. High temperatures combined with high air humidity will increase the curing process. Thus, material inopened containers should be applied immediately. In opened containers, the material will form a film after 1–2 hours approx. (at 75 °F (24 °C) and 50 % R.H.)

Waiting / Recoat Times

Ambient conditions	Minimum waiting time overcoating
+40 °F / 50 % r.h.	18 hours
+50 °F / 50 % r.h.	8 hours
+70 °F / 50 % r.h.	6 hours

*After 7 days the surface must be cleaned and primed with Sika® Concrete Primer Lo-VOC or Sika® Reactivation Primer before continuing.
Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Applied Product Ready for Use

Ambient conditions	Rain resistant	Touch dry	Full cure
+40 °F / 50 % r.h.	1 hour	12 hours	24 hours
+50 °F / 50 % r.h.	1 hour	6 hours	18–24 hours
+70 °F / 50 % r.h.	1 hour	4 hours	12–18 hours

Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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

- Minimum age of concrete must be 28 days depending on curing and drying conditions
- Do not thin with solvents
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect material with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure.This condition may 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 pinholing or blistering may occur
- Use sunglasses with UV filter when applying highly reflective Sikalastic®- 641 Lo-VOC White (RAL 9016).
- Do not use for indoor applications unless sufficient air flow and ventilation are provided to prevent odors and/or vapors from leaving the immediate work area
- 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
- For areas with direct exposure to heavy or frequent foot traffic, an additional wear coat protection with slip resistant aggregate is required. Opening to traffic prior to cure may result in loss of aggregate or permanent staining and subsequent premature failure
- Do not apply cementitious products, such as tile mortar directly onto Sikalastic®- 641 Lo-VOC. See Sikalastic®-624 WP or Sikalastic®-644 Lo VOC Product Data Sheet
- 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 and subsequent approval by Technical Services is required
- Opening to traffic prior to cure may result in permanent staining and subsequent premature failure
- On grade concrete decks should not be covered with Sikalastic® RoofPro membrane systems
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks, and lightweight insulating concrete deck overlays should not be covered with Sikalastic® RoofPro systems without additional deck evaluation and subsequent approval by Technical Services
- Do not subject to continuous immersion, i.e., fountains, ponds, pools, or interior of tank.
- Not recommended for use over ceramic tile

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

All substrate surfaces shall be clean, dry and sound. Acceptable substrates include: sound concrete and cementitious screed, metals, wood, modified bitumen, mineralized felt, EPDM, hypalon, TPO, sprayed polyurethane foam, brick and stone, slate and tile, and existing liquid applied membranes. Reference separate System Data Sheet for specific surface preparation requirements.
Primer
Apply primer of a type suitable for the substrate. Allow primer to cure completely before applying Sikalastic®-641 Lo-VOC resin. Reference separate System Data Sheet for specific primer recommendations.

MIXING

No mixing necessary

APPLICATION

Sika Reemat - Base Resin
Apply Sikalastic®-641 Lo-VOC resin to the primed substrate surface by means of 1/2” (12.7 mm) nap phenolic resin core roller or brush at the specified application rate to achieve a uniform and consistent wet mil thickness (reference separate System Data Sheet). Material can also be squeegee or spray applied, in which case it should also be backrolled. Apply Sika Reemat into the wet embedment resin and roll the scrim to achieve full saturation and embedment. Reemat shall be torn/cut to conform to substrate transitions and flashing conditions, with a typical 2” (50.8 mm) reinforcement overlap. Resin shall saturate the Reemat from below. Apply additional Sikalastic®-641 Lo-VOC resin as required to ensure full scrim embedment. Allow to cure completely before applying subsequent resin layers.

Sika Reemat - Intermediate and Top Resin
Apply Sikalastic®-641 Lo-VOC resin to the cured Sikalastic®/Reemat base layer by means of 1/2” (12.7 mm) nap phenolic resin core roller or brush at the specified application rate to achieve a uniform and consistent wet mil thickness (reference separate System Data Sheet). Material can also be squeegee or spray applied, in which case it should also be backrolled. Allow to cure completely before applying any subsequent resin layer, if specified.

Sika Fleece

Apply Sikalastic®-641 Lo-VOC resin to the primed substrate surface by means of 1/2" (12.7 mm) nap phenolic resin core roller or brush to achieve a uniform and consistent thickness, applying approximately 2/3 of the resin required to achieve the specified application rate (reference separate System Data Sheet). Apply Sika Fleece into the wet embedment resin and roll the fleece to achieve partial saturation and full embedment. Fleece shall be cut to conform to substrate transitions and flashing conditions, with typical 3" (76.2 mm) side and 6" (152.4 mm) end reinforcement overlaps. Resin shall saturate the Fleece from below. Apply remaining 1/3 of the specified resin quantity to to ensure full fleece saturation and an even resin application.

CLEANING OF TOOLS

Clean all tools and application equipment with appropriate solvent immediately after use. Hardened and/or cured material can only be removed mechanically.

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.

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.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com