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 systems.

USES

- Embedment and top 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, and Vegetated 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
- 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

APPROVALS / STANDARDS

- FM Approval Standard 4470 for Class 1 Roof Covers
- Meets ASTM D7311-07: Standard Specification for Liquid-Applied, Single-Pack, Moisture-Triggered, Aliphatic Polyurethane Roofing Membrane.

PRODUCT INFORMATION

Chemical Base	Moisture triggered Polyurethane	
Packaging	5 gal. (19 L) pail	
Colour	White, Pearl Gray, Steel Gray, Mushroom, Copper Green; Custom colors available with minimum order quantity	
Shelf Life	12 months in original, unopened Container	
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	
Density	11.9 lb./gal. (1.4 kg/cm^3)	
Solid content by volume	89 %	(ASTM D-2697)
Volatile organic compound (VOC) content	38 g/l	(ASTM D-2369-81)

TECHNICAL INFORMATION

Tensile Strength	Please refer to Sikalastic®-641 Lo-VOC System Data Sheet	(ASTM D-751)
Elongation at Break	Please refer to Sikalastic®-641 Lo-VOC System Data Sheet	(ASTM D-751)
Tear Strength	Please refer to Sikalastic®-641 Lo-VOC System Data Sheet	(ASTM D-751)
Resistance to Static Puncture	Please refer to Sikalastic®-641 Lo-VOC System Data Sheet	(ASTM D-751))
External Fire Performance	Class A	(ASTM E 108)
Chemical Resistance	Most common roofing contaminants, oils, grease, dilute acids and bases	
Solar Reflectance	0.88 (white - RAL 9016)	(Initial - ASTM C-1549)
Solar Reflectance Index	108	(Initial - ASTM E-1980)
Service Temperature	-22–176 °F (-30–80 °C) intermittent	

APPLICATION INFORMATION

Yield

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 are optimal - coverage rates will vary depending on temperature, surface roughness and porosity, and application technique.

Ambient Air Temperature

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

Relative Air Humidity

80 % R.H. max.

Substrate Temperature

41 °F (5 °C) min. / 140°F (60°C) max.

Dew Point

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

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 Time / Overcoating

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® 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.

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 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

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 loss of

aggregate or 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 tanks.
- Not recommended for use over ceramic tile.

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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