

PRODUCT DATA SHEET

SikaLevel®-825 Lite

Premium Gypsum Based Self-leveling Underlayment

PRODUCT DESCRIPTION

SikaLevel®-825 Lite is a one-component, durable and versatile premium gypsum-based underlayment for interior gypsum, concrete, cementitious, and various other substrates. It can be applied manually or by pump to produce a self-smoothing, rapid-setting, and flat substrate prior to the application of a final floor finish. Application thickness is 1/16" up to 2" (1.5 to 50.8 mm).

USES

- Concrete
- Gypsum
- Cement substrates
- Rapid drying cement screed systems
- OSB/Plywood only suitable for flexible coverings
- Ceramic tiles, terrazzo or natural stones
- Old water-resistant adhesive residues
- For use with SikaBond® adhesives, a minimum application of 1/8" thickness is required

CHARACTERISTICS / ADVANTAGES

- Suitable on gypsum, cement-based, dimensionally unstable and other difficult substrates
- For interior use
- Sets very rapidly for fast job turnaround
- Low dust
- Smooth, fluid and workable
- Free of cracks
- Can be pumped
- High strength
- Very low shrinkage
- Suitable for application on subfloor heating systems
- Suitable for castor wheels loading
- Only a 10-minute waiting time for applications over gypsum, concrete, and cement substrates when using Sika® Level-01 Primer Plus

PRODUCT INFORMATION

Chemical Base	Gypsum-based, polymer-modified binder system and fillers
Packaging	55 lb (24.9 kg) bag
Appearance / Color	Light gray powder
Shelf Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging
Storage Conditions	Store dry at 41–86 °F (5–30 °C) Protect from moisture. If damp, discard material.

TECHNICAL INFORMATION

Compressive Strength	1 day	2,000 psi (13 MPa)	(ASTM C-109)
	7 days	3,000 psi (21 MPa)	73 °F (23 °C)
	28 days	5,600 psi (33 MPa)	50 % R.H.
Flexural Strength	28 day	1,300 psi (7 MPa)	(ASTM C-109) 73 °F (23 °C) 50 % R.H.

APPLICATION INFORMATION

Mixing Ratio	6.3 qts (6 L)		
Fresh mortar density	112 lb/ft ³ (1.79 kg/l)		(ASTM C-138)
Coverage	30-35 ft ² at 1/4" (2.78-3.25 m ² at 6 mm) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste)		
Layer Thickness		Min.	Max.
	Neat	1/16" (1.5 mm)	1/2" (12.7 mm)*
Extended	1/2" (12.7 mm)*	<ul style="list-style-type: none"> ▪ up to 1.5" (38 mm) (35 lb. of sand per 55 lb. bag) (2" in areas <50 sqft.) ▪ up to 2" (50.8 mm) (55 lb. of sand per 55 lb. bag) (2.5" in areas <50 sqft.) 	
	*Drying Time is 1 week for 1/2" pours. For every extra 1/2" thickness poured over 1/2" an additional week of drying time is needed.		
Product Temperature	65–75 °F (18–24 °C)		
Ambient Air Temperature	41–86 °F (5–30 °C) Note: When using water-based adhesives on the finished product the best results will be achieved at ambient and substrate temperatures between 59 and 77 °F (15–25 °C).		
Relative Air Humidity	< 75 % Note: The substrate and uncured product applied on the floor, must be at least 5 °F above dew point to reduce the risk of condensation, blooming or cement laitance forming on the surface.		
Substrate Temperature	41–86 °F (5–30 °C)		
Pot Life	~ 30 minutes As the temperature will affect the pot life, application temperature: <ul style="list-style-type: none"> ▪ Above 73 °F (23 °C) will reduce the pot life and the working time. ▪ Below 73 °F (23 °C) will extend the pot life and the working time. 		
Set Time	105 - 110 minutes		(ASTM C-266)
Final set time	130 minutes		(ASTM C-266)
Applied Product Ready for Use	Walk-on time: 3-4 hours Suitable for overcoating with: Non-moisture sensitive floor covering <u>18 hours up to 1/8" (3.2 mm)*</u> Moisture sensitive floor covering <u>18 hours up to 1/8" (3.2 mm)*</u>		
*Drying Time is 1 week for 1/2" pours. For every extra 1/2" thickness poured over 1/2" an additional week of drying time is needed. *Mat test (ASTM D-4263) above 3/8" (9.5 mm) The actual times will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity, plus the thickness of the material applied. When overcoating SikaLevel®-825 Lite always ensure the moisture content has achieved the required value for the subsequent floor finish adhesive/product being used, as the necessary waiting time will vary (with the application thickness and ambient humidity). Also please refer to the floor finish / adhesive PDS.			

APPLICATION INSTRUCTIONS

All substrate must be dry, stable, sound and free of all contaminants such as grease, oil, paint, wax, dust, curing and sealing compounds that will interfere with the penetration of the primer and the adhesion of SikaLevel®-825 Lite.

SURFACE PREPARATION

Careful consideration should be given to the selection of the method of mechanical surface preparation and the timing of the application of primer and underlayment. Immediately following mechanical preparation on some excessively porous substrates, outgassing will increase for a short period of time (approx. 48 hours) until equilibrium in slab vapor pressure and the ambient environment is reached.

- **Concrete, Cement, and Gypsum Substrates:** Prepare concrete, cement, gypsum, and dense substrates, including ceramic, quarry, and vinyl tiles by mechanical means, such as shot blasting, sandblasting, water-jetting, scarifying, or other appropriate methods, to achieve an open-textured surface. Weak surfaces should be removed. All cracks and holes should be similarly filled to prevent seepage. Repair with Sika® Level SkimCoat or SikaQuick® mortar prior to priming and leveling. For weak substrates, Sika MB® and Sika® MB Redline may be used for consolidation.
- **Cutback Adhesive:** Old water-soluble adhesives should be removed completely. Old water-resistant adhesives should be mechanically removed as much as possible. Mechanical removal of cutback (i.e. grinding, sanding, and blasting) can be hazardous as old cutback adhesive may contain asbestos. Do not sand or grind adhesive residue. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Please consult the adhesive manufacturer and all applicable government agencies for rules and regulations concerning the removal of flooring and adhesives that contain asbestos. Prime remaining adhesive residues accordingly.
- **OSB/Plywood Subfloors:** Where installing SikaLevel®-825 Lite over wooden subfloors, ensure that the subfloor consists of dimensionally stable plywood, a minimum of 3/4" (32 mm) thickness and meets, as a minimum, the deflection parameters of L/360 (live and dead loads taken into consideration). The OSB/plywood must then be suitably secured, bonded, and prepared to a contaminant free and sound condition. Consult the manufacturer of the final floor covering with regard to the deflection requirements of the floor finish system.

PRIMING

- Prime standard absorbent substrates such as gypsum, concrete, and cement with Sika® Level-01 Primer Plus (1:3). Only a 10-minute waiting time when using Sika® Level-01 Primer Plus.
- Prime non-absorbent, smooth, sound substrates such as OSB Board, Plywood, VCT, ceramic tiles, and old water-resistant adhesive residues (removed as much as possible) with Sika® Level-02 EZ Primer.
- Where substrate moisture exceeds the maximum allowed then application of Sika® MB or Sika® MB Redline may be used to suppress residual moisture.
- Gypsum substrates must always be dry prior to installation.
- Refer to the respective PDS for complete and detailed instructions on the usage of each Primer.

MIXING

- Pour 6.3 qts (6 L) of cool potable water (~ 70 °F, 21.1 °C) into a suitably sized and clean mixing container, using a calibrated measuring jug, or similar, to ensure strict control of the water content (do not over-water). If available water is not at this temperature, then consideration should be given to cooling/heating the water.
- Add SikaLevel®-825 Lite to the water, while slowly mixing, adding the complete contents of the bag.
- Mix with a high-speed drill (> 650 rpm) and an egg beater style mixing paddle to blend water and powder for approximately 3 minutes, until a lump-free and uniform mix has been produced.
- Do not overmix or allow the paddle to rise above the level of material as this will introduce and entrap air into the mix, potentially shortening the working life or causing pin-holing in the underlayment.
- Let the mixed material stand until the majority of air bubbles have dispersed.

APPLICATION

- Pour the mix and spread using a smoothing trowel. Even surfaces are easily achieved using a pin leveler.
- It's not recommended to remove troweling defects or to level more than once.
- If a second layer of leveling compound has to be applied, prime the first layer with Sika® Level-01 Primer Plus (1:1) when the first layer is walkable. The maximum layer thickness must not be exceeded in the case of two layer applications and the second layer must not exceed the layer thickness of the first layer.
- Protect curing SikaLevel®-825 Lite layers from high ambient temperatures, direct sunlight and ensure adequate air circulation.
- SikaLevel®-825 Lite does not provide an aesthetic finish and is not intended to be used as a wear layer even if coated or sealed. SikaLevel®-825 Lite must be protected from any type of contamination by installing a suitable floor covering like ceramic tiles, carpet, VCT, wood floor, etc.
- Always install an adequate number of properly located test areas, to include the finish flooring.

- As floor coverings vary, always contact and rely upon the floor covering manufacturer for specific directions such as maximum allowable moisture content, adhesive selection, and intended end use of the product.

CLEANING OF TOOLS

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

LIMITATIONS

- Not suitable for slopes or inclines > 0.5 %.
- Protect SikaLevel®-825 Lite from excessive heat and moving air by turning off radiant heating and forced air ventilation for 24 hours before installation and while the underlayment is curing.
- Prevent contaminants, dust, and dirt from coming into contact with the underlayment for at least 4 hours and do not expose to rolling dynamic loads for 2 days (at 73 °F, 23 °C, 50 % R. H.).
- Protect newly applied SikaLevel®-825 Lite from condensation and water.
- When used between a non-porous substrate and nonbreathable floor covering using water bond adhesives, follow industry and manufacturers guidelines for minimum thickness (typically 1/8", 3.2 mm) and flash times for adhesives.
- Old coverings with cushioned backings are not suitable.
- SikaBond® adhesives and SikaLevel®-825 Lite are not recommended over soft floor coverings.
- If high point loads (e.g. hospitals, etc.) are expected, laying on top of old coverings is not recommended.
- For adhesives other than SikaBond®, a test application is recommended prior to use.
- This product is not a vapor barrier.
- As with all gypsum-based and cement-based materials, avoid contact with aluminum to prevent adverse chemical reactions and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sika® MB.
- It is not recommended to apply an epoxy coating on top of SikaLevel®-825 Lite.
- All cement-based products have the potential for cracking. Cracking, such as hairline cracking cannot be considered as a product defect.
- SikaLevel®-825 Lite is not recommended for use under ceramic tile and other natural stones.

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/L (EPA Method 24)

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

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