

## PRODUCT DATA SHEET

# Sikadur®-27 Lo-Mod

Low-modulus, fast setting, medium-viscosity, epoxy resin binder

#### PRODUCT DESCRIPTION

Sikadur®-27 Lo-Mod is a 2-component, 100 % solids, moisture-tolerant, fast setting epoxy resin binder. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.

#### **USES**

Sikadur®-27 Lo-Mod may only be used by experienced professionals.

Use neat as the binder resin for a skid-resistant broadcast overlay. Use also as the binder resin for epoxy mortar and concrete for patching and overlays.

### **CHARACTERISTICS / ADVANTAGES**

- Fast setting for quick turnaround.
- Meets 3 h/1000 psi requirement when mixed as an epoxy mortar.
- Tolerant to moisture both before and after cure.
- Convenient easy mix ratio A:B = 1:1 by volume.
- Excellent strength development.
- Leveling viscosity for easy, efficient application of a broadcast overlay.
- Successfully used in HFST applications. Refer to local DOT specs. for product acceptance.
- Epoxide Equivalent Weight (ASTM D-1652) < 200</li>

#### PRODUCT INFORMATION

Chemical Base	Epoxy Resin			
Packaging	4 gallon (15 L) units / 110 (416 L) gallon unit / 660 (2498 L) gallon totes.  Note: Part B of the Sikadur® 27 Lo-Mod and Sikadur® 22 Lo-Mod FS is a universal component of these two products.			
Shelf Life	2 years in original	2 years in original, unopened containers		
Storage Conditions	Store dry at 40°-9	Store dry at 40°-95°F (4°-35°C)		
Viscosity	700–2500 Poise	700–2500 Poise (ASTM D-2196		
TECHNICAL INFORMAT	ION			
Compressive Strength	3 hour	2000 psi (13.8 MPa)	(ASTM C-579,	
	1 day	5200 psi (35.9 MPa)	w/plastic inserts) 73 °F (23 °C) 50 % R.H.	

**Product Data Sheet** 

**Sikadur®-27 Lo-Mod**October 2018, Version 01.01
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Tensile Strength		40 °F (4 °C)	73 °F (23 °C)	(ASTM D-638)
	7 day	4330 psi	3200 psi	50 % R.H.
		(30 MPa)	(22 MPa)	-
Elongation at Break		40 °F (4 °C)	73 °F (23 °C)	(ASTM D-638)
	7 day	41 %	50 %	50 % R.H.
Tensile Adhesion Strength	250 psi min (24h)		Pull-off Strength (ASTM C-1583 50mm disks)	
ADDITION INFORMA	TION			

#### APPLICATION INFORMATION

Coverage	1 gal. yields 231 in <sup>3</sup>
	<b>Mortar Binder</b> - 1 gal. of mixed Sikadur®-27 Lo-Mod with the addition of 5 gal. by loose volume of an oven dried sand, yields approximately 808 cu. in. of epoxy mortar.
Open Time	15-45 minutes (ASTM C-881)

#### APPLICATION INSTRUCTIONS

#### SUBSTRATE PREPARATION

Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants.

Preparation Work: Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means.

Steel - Should be cleaned and prepared thoroughly by blast cleaning to white metal finish.

#### **MIXING**

Pre-mix each component. Proportion equal parts by volume of Component 'A' and 'B' into clean pail. Mix thoroughly for 3 min. with Sika paddle on low-speed (400–600 rpm) drill until uniformly blended. Mix only that quantity that can be used within pot life.

To prepare epoxy mortar - Slowly add 5 parts by loose volume of oven-dried sand to 1 part mixed resin.

#### **APPLICATION METHOD / TOOLS**

**Broadcast Overlay** - Prime the prepared substrate with Sikadur®-27 Lo-Mod. While primer is still tacky, spread mixed Sikadur®-27 Lo-Mod with a 3/16 in. (4.7 mm) notched squeegee. When material levels, broadcast the oven-dried aggregate slowly allowing it to settle in the epoxy binder. Ultimately the broadcast aggregate should be applied to excess at a rate of 2 lb./ft2. Remove excess broadcast aggregate after epoxy has set. Priming is an optional step in the broadcast overlay applications. **Epoxy Mortar** - Prime prepared substrate with mixed

Sikadur®-27 Lo-Mod. While primer is still tacky, apply epoxy mortar by trowel or vibrating screed. Finish with finishing trowel. Priming is mandatory when using the Sikadur®-27 Lo-Mod as an epoxy mortar.

#### LIMITATIONS

- Minimum substrate and ambient temperature 40 °F (4
- Minimum age of concrete before application is 21–28 days depending upon curing and drying conditions.
- For on grade, split-slab and unvented metal pan deck, please consult Sika Technical Service regarding moisture limitations.
- Maximum thickness 1/2 in. (13 mm) exterior exposed to thermal change.
- Do not dilute. Addition of solvents will prevent proper
- Use oven-dried aggregates only.
- Material is a vapor barrier after cure.
- Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure.
- For HFST applications, system and application details are governed by local DOT & AASHTO specification.

#### **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

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