

PRODUCT DATA SHEET

Sikadur[®]-22 Lo-Mod

Low-modulus, medium-viscosity, epoxy resin binder

PRODUCT DESCRIPTION

Sikadur[®]-22 Lo-Mod is a 2-component, 100 % solids, moisture-tolerant, epoxy resin binder. It conforms to the current ASTM C-881, Type III, Grade-2, Class-C and AASHTO M-235 specifications.

USES

Sikadur[®]-22 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

- 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.
- Material is USDA-certifiable.

PRODUCT INFORMATION

Packaging	4 gallon units / 110 gallon unit / 660 gallon totes. Note: Part A of the Sikadur 22 Lo-Mod, Sikadur 22 LoMod FS and Sikadur 21 Lo-Mod LV is a universal component of these three products.
Color	Clear to light amber.
Shelf Life	2 years in original, unopened containers.
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–29 °C) before using.
Viscosity	Approximately 2,000 cps.

TECHNICAL INFORMATION

Compressive Strength

	40°F* (4°C)	Mortar 1:3		Neat
		73°F * (23°C)	90°F* (32°C)	73°F* (23°C)
8 hour	-	1,900 (13.1)	2,800 (19.3)	-
16 hour	-	4,300 (29.6)	5,000 (34.5)	1,850 (12.8)
1 day	2,200 (15.2)	5,200 (35.9)	5,200 (35.9)	2,600 (17.9)
3 day	6,500 (44.8)	6,800 (46.9)	5,900 (40.7)	6,200 (42.7)
7 day	7,900 (59.5)	7,200 (49.6)	6,100 (42.1)	6,800 (46.9)
14 day	8,800 (60.7)	7,600 (52.4)	6,100 (42.1)	7,000 (48.3)
28 day	9,500 (65.5)	7,900 (54.5)	6,100 (42.1)	7,200 (49.6)

* Material cured and tested at the temperatures indicated.

Modulus of Elasticity in Compression

28 day	6.6 x 10 ⁴ psi (455 MPa)	(ASTM D-695) 73 °F (23 °C) 50 % R.H.
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Tensile Strength

14 days	5,700 psi (39.3 MPa)	(ASTM D-638) 73 °F (23 °C) 50 % R.H.
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Tensile Modulus of Elasticity

14 days (Neat tested @ 0.5 in/min.)	1.9 x 10 ⁵ psi (1,310 MPa)	(ASTM D-638) 73 °F (23 °C) 50 % R.H.
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Elongation at Break

14 days	> 30 %	(ASTM D-638) 73 °F (23 °C) 50 % R.H.
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Tensile Adhesion Strength

	Mortar 1:3	Neat	ASTM C1583; ACI 503)
7 days	510 psi concrete fail	570 psi concrete fail	73 °F (23 °C) 50 % R.H.

Shear Strength

	Mortar 1:3	Neat	(ASTM D-732)
7 days	3,000 psi (22.7 MPa)	5,700 psi (37.2 MPa)	73 °F (23 °C) 50 % R.H.

Abrasion Resistance

	Mortar 1:3	Neat	(Taber Abrader)
14 days Weight loss, 1,000 cycles	1.8 gm (H-22 wheel; 1,000 gm weight)	.030 gm (CS-17 wheel; 1,000 gm weight)	73 °F (23 °C) 50 % R.H.

Water Absorption

		Neat	(ASTM D-570)
7 days	(24 hour immersion)	0.26 %	73 °F (23 °C) 50 % R.H.

APPLICATION INFORMATION

Mixing Ratio

Component 'A':Component 'B' = 1:1 by volume.

Coverage

1 gal. yields 231 in³
Mortar Binder - 1 gal. of mixed Sikadur®-22 Lo-Mod with the addition of 3 gal. by loose volume of an oven dried sand, yields approximately 808 in³ of epoxy mortar.

Pot Life

Approximately 30 minutes (200 gram mass).

Cure Time

Tack-Free Time

40 °F (4 °C)
6-8 hours

73 °F (23 °C)
5 hours

90 °F (32 °C)
2.5 hours

Traffic Time: 24 hours

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 (CSP 3-4 as per ICRI) by blast cleaning or equivalent mechanical means.

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

MIXING

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 3 parts by loose volume of oven-dried sand to 1 part of mixed Sikadur®-22 Lo-Mod until uniform in consistency.

APPLICATION METHOD / TOOLS

Broadcast Overlay - Prime the prepared substrate with Sikadur®-22 Lo-Mod. While primer is still tacky, spread mixed Sikadur®-22 Lo-Mod with a 3/16 in. 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 lbs./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® 22 Lo-Mod or Sikadur® 21 Lo Mod LV. While primer is still tacky, apply epoxy mortar by trowel or vibrating screed. Finish with finishing trowel. Priming is mandatory when using the 22 Lo Mod as an epoxy mortar.

LIMITATIONS

- Minimum substrate and ambient temperature 40 °F (4 °C).
- For on grade, split-slab and unvented metal pan deck, please consult Sika Technical Service regarding moisture limitations.
- Minimum age of concrete before application is 21–28 days depending upon curing and drying conditions.
- Do not use on exterior slab on grade.
- Maximum thickness 1/2 in. (13 mm) exterior exposed

to thermal change.

- Do not dilute. Addition of solvents will prevent proper cure.
- 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.

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.

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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