BUILDING TRUST

PRODUCT DATA SHEET

Sikadur®-120 PU

Polyurethane Joint Nosing and Patching System

PRODUCT DESCRIPTION

Sikadur®-120 PU is a flexible, durable, high impact, elastomeric concrete material comprised of a two component polyurethane resin mixed with its own proprietary aggregate. Sikadur®-120 PU is a nonhazardous, fast setting, low VOC material.

USES

Sikadur®-120 PU may only be used by experienced professionals.

- Exterior concrete joint nosing repairs
- Exterior concrete spall repairs
- Concrete roadways, bridges, sidewalks, plazas, parking garages, etc.

CHARACTERISTICS / ADVANTAGES

- Durable surface for vehicular traffic
- Flexible and impact resistant
- Excellent adhesion to mechanically prepared surfaces
- After cured, performs well in extreme ambient and substrate temperatures
- Compatible with appropriate Sikasil® silicone sealants and Sikadur® epoxy products
- Good chemical resistance (e.g. road salts, deicing agents, automotive fluids, etc.)
- Fast mixing; easy to install
- Economical

PRODUCT INFORMATION

Packaging

A "Kit" is comprised of two cartons (each containing two cans of Component 'A' and two cans of Component 'B') plus two pails of Component 'C'. 1 Kit = 2 separate, mixable units.

Component	Container Quantities	Pallet Quantities
'A' Liquid	1 gallon (3.8 liters) can filled with ~ 1 gallon (3.8 liters)	180 cartons
'B' Liquid	1 gallon (3.8 liter) can filled with ~ 0.5 gallon (1.9 liters)	180 cartons
'C' Aggregate	5 gallon (18.9 liter) pail filled with ~ 58 lbs (26.3 kg)	48 pails

	Installation requires Sikadur®-32 Hi-Mod epoxy bonding adhesive, initially installed onto prepared concrete surfaces as a primer. For additional information, please consult the current product data sheet for Sikadur®-32 Hi-Mod.
Color	Component 'A': Liquid / Black Component 'B': Liquid / Brown Component 'C': Granular Powder / Tan Mixed Mortar ('A'+'B'+'C'): Dark Grey to Black
Shelf Life	**Component** — **Shelf life*** 'A' Liquid — 24 months 'B' Liquid — 12 months 'C' Aggregate — 24 months *From date of production in original, unopened, undamaged, and sealed packaging.
Storage Conditions	Store in cool, dry, well ventilated conditions, out of direct sunlight at 40° - 95°F (4° - 35 °C).

TECHNICAL INFORMATION

Shore D Hardness	14 days	65	(ASTM D2240) 73°F (23°C), 50% RH
Compressive Strength	24 hr, 73°F (23°C), 50% RH	2,000 psi (13.8 MPa)	(ASTM C579) 73°F (23°C), 50% RH (ASTM D695) 73°F (23°C), 50% RH
	14 days	2,500 psi (17.2 MPa)	
	7 day Resilience @ 5% Deflection	> 99%	
Compressive Stiffness	Impact Resistance @ -20°F (-28°C)	No Cracking > 160 inch-lb_f (177 meter- Kg)	(ASTM D3029)*
	Impact Resistance @ 32°F (0°C)	No Cracking > 160 inch-lb_f (177 meter- Kg)	
	Impact Resistance @ 158°F (70°C)	No Cracking > 160 inch-lb_f (177 meter- Kg)	
	*Mixed neat [Components 'A' + 'B' only]		
Tensile Strength	7 days	> 1,900 psi (13.1 MPa)	(ASTM D638)* 73°F (23°C) 50% RH
	14 days	> 2,000 psi (13.8 MPa)	
	*Mixed neat [Components 'A' + 'B' only]		
Elongation at Break	14 days	50%	(ASTM D638)* 73°F (23°C) 50% RH
	* Mixed neat [Components 'A' and 'B' only]		

APPLICATION INFORMATION

Coverage	Kit Yield: 1 mixed unit = 0.6 ft³ (0.02 m³) x 2 units per kit = 1.2 ft³ (0.04 m³) total
Layer Thickness	1/2 inch (12 mm) minimum / 6 inches (152 mm) maximum. For deeper applications, contact Sika Technical Services. For Joint Nosing Blockout: Width to Depth ratio = 2:1 (typical)
Product Temperature	Condition components to 65 - 75 °F (18 - 24 °C) before mixing.
Ambient Air Temperature	45 °F (7 °C) minimum / 95 °F (35 °C) maximum
Dew Point	To avoid dew point conditions during application relative humidity must be

	no more than 95% and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperature.	
Substrate Temperature	45 °F (7 °C) minimum / 95 °F (35 °C) maximum	
Pot Life	Approximately 5 - 10 minutes Pour out of container immediately after mixing	(ASTM C881) 73°F (23°C), 50% RH
Applied Product Ready for Use	At ambient and substrate temperatures of 73 °F (23 °C), 50% R.H. forms can be removed after a minimum 1 hour. Sikadur®-120 PU can typically accept traffic within 2 hours after installation.	

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surfaces must be clean, sound, dust-free and dry. Remove dust, laitance, grease, curing compounds, impregnations, waxes, loose foreign particles, disintegrated materials and all other contaminants. Install appropriate forms as required by the application. Forms must be tight and sealed if necessary, to prevent leakage of Sikadur®-120 PU. Mask off and protect any adjacent surfaces that should not receive contact with Sikadur®-120 PU.
Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface (minimum CSP-3 to CSP-4 per ICRI guidelines) by blast cleaning or equivalent mechanical means.

Steel - Should be cleaned and prepared thoroughly by blast cleaning to a bright, dry, white metal finish, free of rust and scale (reference: SSPC-SP5/NACE 1 guideline).

Priming: Sikadur®-32 Hi-Mod epoxy bonding adhesive shall be used as a primer directly before placement of Sikadur®-120 PU. Do not allow the primer to cure prior to placement of Sikadur®-120 PU. Sikadur®-32 Hi-Mod shall be installed at a typical rate of approximately 70 - 80 ft²/gal (1.7 - 2 m²/liter). Coverage may vary depending on substrate profile and porosity. For additional information, please consult the current product data sheet for Sikadur®-32 Hi-Mod.

MIXING

Pre-mix each component. Pour entire contents of Component 'A' into a clean, 5 gallon (18.9 liter) container. Add entire contents of Component 'B' into the mixing container. Scrape the insides and bottoms of both component pails with a clean, plastic spatula or similar implement to ensure they have been emptied. Mix thoroughly for approximately 10 to 15 seconds with a low speed (400 - 600 rpm) rotary drill and an "eggbeater" style mixing paddle or Jiffy mixing paddle until a uniform blend in color (i.e. Black) is achieved. While still mixing, slowly add the entire contents Component 'C' to the liquids and mix for approximately 30 additional seconds until a uniform consistency is achieved. **Do not overmix.** Total amount of mixing time typically should not exceed 90 seconds maximum.

APPLICATION METHOD / TOOLS

Immediately after mixing, pour Sikadur®-120 PU onto the primed concrete surfaces within the spall area and/or into the form. Sikadur®-120 PU will tend to self level and should require very little tooling or finishing. Any air bubbles present from the mixing procedure will gradually surface. To achieve a consistent appearance, when Sikadur®-120 PU is no longer movable, lightly trowel surface to break bubbles. Trowel the material as little as possible prior to and after initial set. Remove any masking tape and protection that may have been applied in the repair area immediately after installation while product is still uncured.

CLEANING OF TOOLS

Uncured material can only be removed from surfaces with an approved solvent (e.g. Acetone, MEK or Xylene). Equipment should be cleaned immediately after use. Strictly follow solvent manufacturer's warnings and instructions for use. Cured material can only be removed from surfaces by mechanical means.

LIMITATIONS

- Minimum age of concrete before application should be 21- 28 days depending upon actual curing and drying conditions.
- Substrate must be dry prior to application. Do not apply to a frosted or wet surface. Do not proceed if rain is imminent within 8 - 12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather. For additional information, please consult the current product data sheet for Sikadur®-32 Hi-Mod.
- Maximum moisture content of prepared substrate shall be less than 4% when measured in accordance with ASTM F2659.
- Do not dilute resin. Addition of solvents will prevent proper cure.
- Material is a vapor barrier after cure.
- Not an aesthetic product.

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 information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

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

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537