

Product Data Sheet
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Sikadur 42, Grout-Pak

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Pre-proportioned, epoxy, baseplate grouting system

Description	Sikadur 42, Grout-Pak is a 3-component, 100% solids, moisture-tolerant, epoxy baseplate grouting system.
Where to Use	<ul style="list-style-type: none"> ■ Precision seating of baseplates. ■ Grouting under equipment, including heavy impact and vibratory machinery, reciprocating engines, compressors, pumps, presses, etc. ■ Grouting under crane rails. ■ Grouting for "pour-back" anchorage on post tensioning projects (e.g. segmental bridge).
Advantages	<ul style="list-style-type: none"> ■ Ready to mix, pre-proportioned kit. ■ Moisture-tolerant. ■ Non-shrink. ■ Self-leveling. ■ Corrosion and impact resistant. ■ Stress and chemical resistant. ■ Low heat development. ■ High compressive strength. ■ Long working time. ■ High vibration resistance. ■ Fast strength gain. ■ Low peak exothermic system for large pours. ■ Minimal shrinkage/expansion. ■ High effective bearing area. ■ Excellent flowability. ■ USDA certifiable.
Packaging	0.5 cu. ft. kit: contains 0.9 gallons epoxy (Component 'A' and Component 'B') in a 5 gallon pail, separated with a topline; and 50 lb.... aggregate (Component 'C') in a multi-wall bag.

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

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. Component 'C' must be kept dry.		
Color	Concrete gray		
Consistency	Flowable		
Application Life	Approximately 90 minutes		
Tensile Properties (ASTM C-307) 7 day	Tensile Strength	2,300 psi (15.8 MPa)	
Flexural Properties (ASTM C-580) 7 day	Flexural Strength (Modulus of Rupture)	4,000 psi (27.6 MPa)	
	Tangent Modulus of Elasticity	1.30 x 10 ⁶ psi (8,963 MPa)	
Water Absorption (ASTM C-413) 7 day (2-hour boil)		0.04%	
Bond Strength (ASTM C-882 modified) 7 day	Bond Strength to Concrete	4,200 psi (29.0 MPa)	
	Bond Strength to Steel	3,800 psi (26.2 MPa)	
Coefficient of Thermal Expansion (ASTM C-531)	24.5 x 10 ⁻⁶ in./in./°F (13.7x10 ⁻⁶ mm/mm/°C)		
Thermal Compatibility (ASTM C-884)	passes test		
Effective Bearing Area¹	>95%		
Compressive Properties (ASTM C-579B): Compressive Strength, psi (MPa)			
	40°F* (4°C)	73°F* (23°C)	90°F* (32°C)
8 hour	-	-	5,500 (37.9)
16 hour	-	9,600 (66.2)	9,800 (67.6)
1 day	-	12,200 (84.1)	11,500 (79.3)
3 day	4,800 (33.1)	14,000 (96.6)	14,000 (96.6)
7 day	13,700 (94.5)	14,900 (102.8)	14,800 (102.1)
14 day	13,900 (95.9)	15,000 (103.4)	15,200 (104.8)
28 day	13,900 (95.9)	15,200 (104.8)	15,600 (107.6)

* Material cured and tested at the temperatures indicated.
1 Percent final surface area of grout in contact with bearing plate.



How to Use

Surface Preparation

Substrate and baseplate contact area must be clean, sound, and free of standing water. Remove dust, laitance, oils, grease, curing compounds, waxes, impregnations, foreign particles, coatings and disintegrated materials by mechanical means (i.e., sandblasting, bush hammering). Sandblast metal baseplates to a commercial white finish for maximum adhesion. Apply grout immediately to prevent re-oxidizing. Concrete substrate shall have reached its desired strength (3,000 psi minimum), and must be dimensionally stable.

Forming

The flowable consistency of the epoxy adhesive grout system requires the use of forms to contain the material around the baseplates. In order to prevent leakage or seepage, completely seal all forms. Apply polyethylene film or wax to all forms to prevent adhesion of the grout. Prepare form work to maintain a 2 in. (50 mm) liquid head to facilitate placement. A grout box that can be attached to the form will enhance the grout flowability. Projected anchor bolts should be wrapped with neoprene foam rubber (or similar) to prevent grout from adhering to the bolts. The use of expansion joints is recommended on large pours to minimize the potential for cracking in the epoxy grout (maximum 3-4 ft. spacing in each direction).

Mixing

Mix the entire contents of Components 'A' & 'B' for 2 minutes with a Sika paddle on a **low-speed** (400 - 600 rpm) drill, taking care not to entrain air during mixing. It is critical to the performance of the grout that there be no appreciable air bubbles in the grout. Slowly add the **entire** contents of Component 'C' and mix until uniformly blended (approx. 5 minutes).

Application

Pour the mixed grout into the prepared forms from one side only to eliminate air entrapment. Baseplate should have vent holes around periphery to prevent air pockets from developing. Maintain the liquid head to ensure intimate contact with the base plate. Plungers may be used to ease placement. Place sufficient epoxy adhesive grout in the forms to rise slightly above the underside of the base plate. Grout depth of 1 in. (25 mm) minimum required.

Limitations

- Minimum substrate and ambient temperature 40°F (4°C).
- Do not thin. Addition of solvents will prevent proper cure.
- Material is a vapor barrier after cure.
- Minimum grout depth 1 in. (25 mm).
- Baseplate should be shielded from direct sunlight and rain for a minimum of 24 hours before epoxy grouting, and 48 hours after grouting.
- Maximum grout depth 4 in./lift (101 mm).
- Component 'C' must be kept dry.
- Cold material may require chaining, rodding, and pushing during placement.
- For proper seating, allow grout to rise above the bottom of the base plate.
- **DO NOT BATCH. MIX COMPLETE UNITS.**

Caution

Component 'A' - Irritant; Sensitizer - Contains epoxy resin. Can cause skin sensitization after prolonged or repeated contact. Skin and eye irritant. High concentrations of vapor may cause respiratory irritation. Avoid skin contact. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. Remove contaminated clothing.

Component 'B' - Corrosive; Sensitizer - Contains amines. Contact with eyes or skins may cause severe burns. Can cause skin and/or respiratory sensitization after prolonged or repeated contact. Skin and eye irritant. Vapors may cause respiratory irritation. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. Remove contaminated clothing.

Component 'C': Irritant; Suspect Carcinogen - Contains sand (crystalline silica 14808-60-7); NJTSRN 02944800-5011p. Skin and eye irritant. Avoid contact. Dust may cause respiratory tract irritation. Avoid breathing dust. Use only with adequate ventilation. May cause delayed lung injury (silicosis). IARC listed crystalline silica as having sufficient evidence of carcinogenicity in laboratory animals and listed evidence of carcinogenicity in humans. NTP also lists crystalline silica as a suspect carcinogen. Use of safety goggles and chemical resistant gloves is recommended. If PELs are exceeded, an appropriate, properly fitted NIOSH approved respirator is required. Remove contaminated clothing.

First Aid

In case of skin contact, wash immediately and thoroughly with soap and water. If symptoms persist, consult a physician. For eye contact, flush immediately with plenty of water for at least 15 minutes, contact a physician. For respiratory problems, remove person to fresh air; if symptoms persist, contact a physician. In case of ingestion, dilute with water and consult physician. Remove contaminated clothing.

Clean Up

In case of spills or leaks, wear suitable protective equipment, contain spill, collect with absorbent material, and transfer to suitable container. Ventilate area. Avoid contact. Dispose of in accordance with current, applicable local, state and federal regulations.

KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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 technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

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