



**PRODUCT DATA SHEET**

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EPOXY GROUTING

# Sikadur®-42 Grout Pak LE<sup>CA</sup>

## PRE-PROPORTIONED, PRECISION EPOXY GROUTING SYSTEM

<b>Description</b>	Sikadur®-42 Grout Pak LE <sup>CA</sup> is a high strength, multi-purpose, three-component, precision grouting system. It is solvent-free, moisture insensitive and it generates both low exotherm and low dusting during installation. The grout has been designed to seat and support high demanding equipment.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>▪ Precision seating of baseplates</li> <li>▪ Precision grouting of wind turbine tower bases</li> <li>▪ Grouting under equipment, including heavy impact and vibratory machinery, reciprocating engines, compressors, pumps, presses, etc.</li> <li>▪ Grouting under crane rails</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>▪ Meets API Standard 686</li> <li>▪ Low peak exotherm</li> <li>▪ Low dusting, ready-to-mix, pre-proportioned kits</li> <li>▪ Moisture insensitive</li> <li>▪ Corrosion and impact resistant</li> <li>▪ Stress and chemical resistant</li> <li>▪ High compressive, tensile and shear strengths</li> <li>▪ High vibration resistance</li> <li>▪ Low coefficient of thermal expansion; compatible with concrete</li> <li>▪ Material does not require heated transportation</li> </ul>

<b>Technical Data</b>	
<b>Packaging/Yield</b>	
Component A	9.1 L [10.24 kg (22.5 lb)] pails
Component B	3.7 L [3.57 kg (7.8 lb)] pails
Component C	6 x 19.4 kg (42.7 lb) bags
Yield (per kit)	56.6 L (2 ft <sup>3</sup> )
<b>Colour</b>	Dark Brown
<b>Shelf Life</b>	2 years in original, unopened packaging. Store dry between 5 and 32 °C (41 and 89 °F). Condition material between 23 and 30 °C (73 and 86 °F) for 48 hours prior to using. For temperatures outside of this range, contact Sika Canada Technical Services.
<b>Mix Ratio</b>	
Ratio solid/liquid by weight	8.43:1
<b>Properties at 23 °C (73 °F) and 50 % R.H.</b>	
<b>Density</b>	2300 kg/m <sup>3</sup> (144 lb/ft <sup>3</sup> )
<b>Pot Life, Mix 3:1 (A:B 300 g)</b>	2 h 20 min
<b>Compressive Strength ASTM C579, MPa (psi)</b>	
	<b>23 °C (73 °F)*</b>
24 h	16 (2321)
2 days	50 (7255)
3 days	70 (10 157)
7 days	83 (12 038)
28 days	92 (13 340)
*Product cured and tested at temperatures indicated	
<b>Tensile Strength ASTM D638</b>	14.0 MPa (2031 psi)
<b>Elongation ASTM D638</b>	0.75 - 1.00 %
<b>Flexural Strength ASTM C580</b>	28 MPa (4062 psi)
<b>Tangent Modulus of Elasticity in Bending ASTM C580</b>	15 GPa (21.7 x 10 <sup>5</sup> psi)
<b>Coefficient of Thermal Expansion ASTM C531</b>	
-30 °C to 30 °C (-22 to 86 °F)	2.3 x 10 <sup>-5</sup> / °C (1.3 x 10 <sup>-5</sup> / °F)
24 °C to 100 °C (75 to 212 °F)	3.0 x 10 <sup>-5</sup> / °C (1.7 x 10 <sup>-5</sup> / °F)

<b>Bond Strength ASTM C882</b>	
Slant shear	> 40 MPa (5804 psi) concrete failure
<b>Creep Test ASTM C1181</b>	
4.1 MPa, 60 °C (600 psi, 140 °F)	4.5 x 10 <sup>-3</sup>
2.7 MPa, 60 °C (400 psi, 140 °F)	3.5 x 10 <sup>-3</sup>
<b>Linear Shrinkage ASTM C531</b>	0.060 %
<b>Thermal Compatibility ASTM C884</b>	No delamination/pass
<b>Exotherm at 23 °C (73 °F) ASTM D2471</b>	34.6 °C (94.3 °F)
<b>Flammability ASTM D635</b>	Self-extinguishing
<i>Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.</i>	

## HOW TO USE

### Surface Preparation

For optimum results when grouting in critical items of equipment, it is recommended that the surface preparation requirements of the latest edition of Chapter 5, API Recommended Practice 686 be followed. This document is the "Recommended Practices for Machinery Installation and Installation Design" published by the American Petroleum Institute.

Surface and base plate contact area must be clean and sound. For best results, the substrate should be dry. Remove dust, laitance, oils, grease, curing compounds, impregnations, waxes, foreign particles, coatings, and disintegrated materials by mechanical means, i.e. chipping with a chisel and sandblasting. Sandblast metal base plates to a commercial white finish (SP-10) for maximum adhesion. Apply grout immediately to prevent re-oxidizing of metal. All anchor pockets or sleeves must be void of water.

**Forming:** The consistency of the epoxy grout system requires the use of forms to contain the material around the base plates. In order to prevent leakage or seepage, all forms must be sealed. Apply polyethylene film or wax to all forms to prevent adhesion of the grout. Prepare form work to maintain more than 100 mm (4 in) liquid head to facilitate placement. A grout box equipped with an inclined trough attached to the form will enhance the grout's flowability and minimize air encapsulation.

**Note:** Expansions joints are recommended especially in exterior applications. 13 mm wide joints spaced 1.5 m OC are advisable. Joints can be filled with an appropriate Sikaflex® sealant once formwork/falsework is removed.

### Mixing

Thoroughly stir both Component A and Component B, distributing any settled solids and achieving an even consistency throughout each component. Mix the entire contents of components A and B in the component A pail for three (3) minutes with an adequate paddle attached to a low speed drill (300 - 450 rpm). During the mixing operation, scrape down the sides and bottom of the mixing pail with a flat or straight edge trowel at least once, to ensure complete mixing of A and B components. Empty entire contents of mixed A and B components into an appropriate mortar mixer ensuring that walls and bottom of mixing pail are scraped clean and all of mixed epoxy resin is added to mortar mixer. Slowly add the entire content of component C and mix until uniformly blended (approx. 5 minutes). Add all six (6) bags of component C unless a smaller quantity is pre-advised by the Sika Representative. Mixed grout should be kept agitated prior to placement.

### Application

Pour the mixed grout into the prepared forms from one or two adjacent sides only, to avoid air entrapment. Maintain the liquid head to ensure intimate contact to the base plate. The minimum void depth beneath the base-plate should be 25 mm (1 in), but 38 mm (1.5 in) is preferred to facilitate the application. Where the void beneath the base plate is greater than 450 mm (18 in), place the epoxy grout in successive 450 mm (18 in) lifts or less, once the preceding lift has cooled. The last lift must be kept at 50 mm (2 in) of thickness. Place sufficient epoxy grout in the forms to rise slightly above the underside [3 mm (1/8 in)] of the base plate.

### Clean Up

Collect and sweep into appropriate containers. Dispose of in accordance with applicable local regulations. Uncured material can be removed with Sika® Epoxy Cleaner. Cured material can only be removed mechanically.

### Limitations

- If material is subject to cold or freezing temperatures during transportation to or storage on a job site, care must be taken to properly precondition A, B, and C components prior to beginning grouting operations.
- Cold ambient, substrate or material temperatures will inhibit the flow and curing characteristics of Sikadur®-42 Grout Pak LE<sup>CA</sup>. For temperatures below 23 °C (73 °F), contact Sika Canada Technical Service.
- Grouting material must be stored in an area with an ambient temperature between 23 and 30 °C (73 and 86 °F) for a minimum of 48 hours before use.
- Should ambient, substrate or material temperatures exceed 30 °C (86 °F) contact Sika Canada Technical Service for guidance as excessive heat can influence the properties of epoxy polymer grouts.
- Do not thin with solvents. Solvents will prevent proper cure.
- Material is a vapour barrier after cure.
- Minimum grout thickness: 25 mm (1 in).
- Maximum grout thickness: 450 mm (18 in) per lift. For grout thickness between 300 - 450 mm (12 - 18 in), contact Sika Canada Technical Service.
- Component C must be kept dry.
- For bolt grouting applications, contact Sika Canada Technical Service.
- Mix complete units only.
- Do not subject cured epoxy grout to sudden temperature changes especially during early curing stages.
- Contact Sika Canada Technical Service for control joint spacing on large base plate grouting projects.

**Health and Safety  
Information**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

**KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY**

The Information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: [www.sika.ca](http://www.sika.ca)

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