

PRODUCT DATA

3^{03 01 00} Maintenance of
Concrete**SCB CONCRESE[®] 1446**

Rapid-setting paste epoxy

Description

SCB Concrese[®] 1446 paste epoxy is a two-component thixotropic, rapid-setting epoxy adhesive.

Yield

Smooth surfaces: 12 ft²/gallon
(0.30 m²/L)

Coverage rate is approximate and assumes a thickness of 1/8" (3 mm) over a smooth surface.

Packaging

1 gallon (3.8 L) units

Shelf Life

2 years when properly stored

Storage

Store in a clean, dry area at temperatures between 60 and 90° F (16 and 32° C).

Features

- Fast curing
- Low odor during cure
- Moisture insensitive
- Nonsag consistency

Benefits

- Quickly returns structures to service
- Can be used indoors
- Bonds to damp surfaces
- Ideal for vertical and overhead applications

Where to Use

APPLICATION

- Surface sealing of cracks before injection
- Grouting bolts and pins
- As a structural adhesive

LOCATION

- Vertical and overhead surfaces
- Interior or exterior

SUBSTRATE

- Concrete and masonry

How to Apply**Surface Preparation**

CONCRETE

1. Substrates may be dry or damp, although dry surfaces obtain optimum results. New concrete must be fully cured (28 days minimum).
2. Remove grease, wax, oil contaminants, and curing compounds by scrubbing with an industrial-grade detergent, a degreasing compound, or a solvent strong enough for complete removal. Follow with a mechanical cleaning.
3. Remove weak, contaminated, or deteriorated concrete by shotblasting, bushhammering, scarifying, or other suitable means. Follow mechanical cleaning with vacuum cleaning.

STEEL

Remove dirt, grease, and oil with suitable industrial-grade cleaning or degreasing compounds. Remove rust and mill scale by gritblasting. Blast steel to white metal. Follow gritblasting with vacuuming or oil-free dry-air blast.

Mixing

1. The mixing ratio is 2 (Parts A) to 1 (Part B).
2. Mix only the amount of material usable before the pot life expires. Thoroughly stir each separate component before mixing.
3. Measure (ratio) the components carefully and then add Part B (hardener) to Part A (resin).
4. Mix Parts A and B using a low-speed drill (600 rpm) and mixing paddle (e.g., a Jiffy mixer). Carefully scrape the sides and bottom of the container while mixing. Keep the paddle below the surface of the material to avoid entrapping air. Proper mixing will take at least 3 – 5 minutes. Well-mixed material will be free of streaks or lumps.

Technical Data

Composition

SCB Concrecre® 1446 is a two-component thixotropic epoxy.

Compliances

- ASTM C 881, Type I, II, IV, V, Grade 3, Class C

Typical Properties

PROPERTY	VALUE
Mix ratio , by volume	2 to 1
Form	Paste
Pot life , min (100 g mass)	8 – 12

	PART A	PART B	MIXED
Color	White	Black	Gray
Density , lb/gal (kg/L)	11.3 (1.35)	9.2 (1.10)	10.9 (1.31)

Test Data

PROPERTY	RESULTS	TEST METHODS
Concrete pullout (Elcometer) , psi (MPa)		ASTM D 4541
Hours	at 46° F (8° C) at 73° F (23° C)	
1	NC 300 (2.1) AF	
1.5	NC 500 (3.4) CF	
2	NC —	
3	NC —	
4	300 (2.1) AF —	
5	500 (3.4) CF —	
Slant shear strength , psi (MPa)		ASTM C 882
Hours	at 46° F (8° C) at 73° F (23° C)	
1.5	— 2100 (14.5) AF	
2	— 5400 (37.2) CF	
3	— —	
5	2130 (14.7) AF —	
6	3150 (21.7) AF —	
7	4000 (27.6) CF —	

NC = No cure

AF = Adhesive failure

CF = Concrete failure

Test results are averages obtained under laboratory conditions. Expect reasonable variations.

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C) and 50% relative humidity.

Application

Bonding to a clean, damp surface is possible but less desirable than to a dry surface. When applying this product to a damp surface, remove water with oil-free air blast.

GENERAL BONDING

1. Deep surface irregularities can be faired with a 1-to-1 sand-to-epoxy mix. Allow this fairing material to set. Within 24 hours, apply neat Concrecre® 1446 epoxy bonding agent with a trowel in sufficient quantities to fill all gaps between mated surfaces.
2. The bondline thickness should be 1/32 – 1/8" (0.8 – 3 mm). Ideally, a small amount of bonding agent should extrude from the joint when surfaces are mated when pressure is applied. Surfaces must be mated while the paste is still tacky (within open time).

BOLT AND REBAR GROUTING

1. Cutting holes by rotary percussion drilling produces the best results. After drilling, scrub the holes with a stiff nonmetallic brush and blow out with nylon-bristled blow-gun attachment with oil-free compressed air. Where the holes will be precast into the concrete, cast them undersize, then drill them to fit.
2. The recommended diameter of the hole is 1/4" (6 mm) larger than the bar's; larger or smaller annular space is less desirable.
3. Install a measured amount of the bonding adhesive into the bottom of the hole with a caulking gun equipped with an extension nozzle. Insert the bar, displacing the paste, then secure it in the center of the hole. Remove excess bonding agent from around the hole before it hardens. Pressure grouting is recommended for grouting holes deeper than 2 ft (0.6 m).

Clean Up

Clean all tools and equipment immediately with xylene or mineral spirits. Cured material must be removed mechanically.

For Best Performance

- Application temperature range is 60 to 100° F (16 to 38° C).
- Do not add water or solvents to epoxy components.
- Do not thin with solvents.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

SCB CONCRECISIVE® 1446 PART A RESIN

Caution

Risks

May cause eye irritation. May cause lung irritation and allergic respiratory reaction. May cause skin irritation. Skin sensitizer.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel ill, seek medical advice.

First Aid

If breathing is difficult, move person to fresh air. If you feel ill, seek medical advice. In case of eye contact, flush immediately with plenty of water for 15 minutes and call a physician. For skin, wash thoroughly with soap. If affected by inhalation of vapor or spray mist, remove to fresh air. Ingestion: Drink two glasses of water. Then induce vomiting by taking Ipecac Syrup, salt water or by placing finger at back of throat. DO NOT give anything by mouth to an unconscious person.

For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65

This product does not contain materials listed by the state of California as known to cause cancer, birth defects, or reproductive harm.

VOC Content

0 lbs/gal or 0 g/L.

SCB CONCRECISIVE® 1446 PART B HARDENER

Caution

Risks

Harmful if inhaled. Lung irritant. Lung sensitizer. Causes eye burns. Causes skin burns. Harmful if absorbed through skin. Harmful if swallowed.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Do not breathe vapor or spray mist. Avoid prolonged or repeated skin contact. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Do not get in eyes, on skin or clothing. Wear suitable protective clothing. Wear suitable protective clothing. Wear suitable gloves. Wash soiled clothing before reuse.

First Aid

In case of eye contact, flush immediately with plenty of water for 15 minutes and call a physician. In case of contact, immediately wash skin with soap and plenty of water. If inhaled remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician. Thoroughly clean contaminated shoes. DO NOT induce vomiting. Give large quantities of water and at least one ounce of vinegar in water. Get immediate medical attention. DO NOT give anything to an unconscious person.

For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65

This product does not contain materials listed by the state of California as known to cause cancer, birth defects, or reproductive harm.

VOC Content

0 lbs/gal or 0 g/L.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

**BASF Construction Chemicals, LLC –
Building Systems**

889 Valley Park Drive
Shakopee, MN, 55379

www.BuildingSystems.BASF.com

Customer Service 800-433-9517
Technical Service 800-243-6739



LIMITED WARRANTY NOTICE Every reasonable effort is made to apply BASF exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, **BASF MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS,** and BASF shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the BASF Technical Manager.

This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. In particular, BASF disclaims all **CONDITIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. BASF SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND.** BASF reserves the right to make any changes according to technological progress or further developments. It is the customer's responsibility and obligation to carefully inspect and test any incoming goods. Performance of the product(s) described herein should be verified by testing and carried out only by qualified experts. It is the sole responsibility of the customer to carry out and arrange for any such testing. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of any product and does not imply that similar products could not be used.

For professional use only. Not for sale to or use by the general public.

Form No. 1019243 8/07

Printed on recycled paper including 10% post-consumer fiber.

© 2007 BASF

Printed in U.S.A.