

PRODUCT DATA

3 03 01 00 **Maintenance of Concrete****CONCRESI[®] 1250 IUG****Polyurethane injection resin for stopping gushing water****Description**

Concresive[®] 1250 IUG is a one-component polyurethane hydrophobic injection resin with an optional accelerator to control setting times. The resin reacts with water to form rigid closed-cell foam that seals high-pressure and high-volume water leaks from large voids and openings in concrete or gunite structures. The desired rate of expansion and reaction to water can be altered by temperature or by the amount of accelerator used.

Yield

Volume depends on mix ratio of water to resin and moisture in concrete and surrounding soil.

Packaging

Concresive[®] 1250 IUG is packaged in 5 gallon (19 L) pails. An optional 0.2 gallon (0.76 L) bottle of 1200 Series Accelerator may be purchased separately.

Color

Pale yellow liquid

Shelf Life

1 year when properly stored

Features

- Hydrophobic
- Semi-rigid in cured state
- Polyurethane chemistry
- Installs with single- or plural-component injection equipment

Storage

Store in original, unopened containers in a clean, dry area at temperatures less than 80° F (27° C), ideally between 40 and 60° F (4 and 16° C). The shelf life is significantly reduced once the container is opened.

Where to Use

APPLICATION

- Sealing large leaking cracks and joints in concrete and masonry
- Utility vaults
- Tunnels
- Manholes
- Culverts
- Dams
- Water-treatment plants

LOCATION

- Horizontal and vertical surfaces
- Interior or exterior

Benefits

- Repels water in cured state
- Withstands thermal expansion/contraction, wet/dry, and freeze/thaw cycles
- Excellent resistance to fungi, gasses, and chemicals
- Versatile installation methods

How to Apply**Surface Preparation**

1. Clean crack with a wire brush and, if applicable, seal surface with the appropriate sealing material.
2. Drill holes at a 45 degree angle to intersect the fissure being filled at approximately the mid-section of the concrete thickness. Alternate holes whenever possible, from one side of the fissure to the other. The spacing is determined by the width of the crack in relation to the concrete thickness. Minimum spacing should be equal to the concrete thickness where possible. THE INTENTION IS TO FACILITATE THE COMPLETE FILLING OF VOIDS WITH CATALYZED RESIN.
3. Install injection ports or packers in 1/2 – 5/8" (13 – 16 mm) holes so that the top of the sleeve is just below the concrete surface. Flush the cracked concrete or joint with potable water before pumping.

Technical Data

Composition

Concresive® 1250 IUG is a one-component polyurethane injection resin.

Test Data

UNCURED 1250 IUG RESIN

PROPERTY	RESULTS	TEST METHODS
Solids, %	100	ASTM D 1010
Viscosity, cps, depending on temp	250 – 350	ASTM D 1638
Color	Dark brown	
Density, lbs/gal (kg/L)	9.3 (1.1)	ASTM D 1638
Flash point, ° F (° C)	> 350 (177)	ASTM D 93
Corrosiveness	Noncorrosive	
Reaction time, depending on temperature and amount of accelerator used	20 – 30 sec to 6 min	

UNCURED 1200 SERIES ACCELERATOR

PROPERTY	RESULTS	TEST METHODS
Viscosity, cps, at 68° F (20° C)	150 – 200	
Flash point, ° F (° C)	> 300 (149)	

CURED 1250 IUG WITH ACCELERATOR

PROPERTY	RESULTS	TEST METHODS
Tensile strength, psi (MPa)	265 (1.9)	ASTM C 638

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

Mixing

Mix the predetermined accelerator with Concresive® 1250 IUG. See chart below to determine amount of accelerator required.

Reactivity (approximate), Temp 70° F (21° C)

% ACCELERATOR USED (relative to resin)	REACTION TIME (sec)
4	43
8	25
12	15
16	12

Run a small test if time-to-gel is critical. Add the accelerator to the resin at the specified ratio, then add 5 – 20% water content by weight, based on the expansion desired. Reaction or gel time can be adjusted using the accelerator provided.

Application

Inject the product into the concrete beginning at the lowest packer or beginning with the first packer that was flushed on the horizontal crack. Move to the next adjacent port when material appears from a packer. Repeat the injection of the first packer after pumping a number of ports. Pressure will vary from 200 – 2,500 psi (1.4 – 7.2 MPa), depending on crack thickness, concrete thickness, and contamination. Re-inject water into the crack to cure resin left behind in the drill hole.

Clean Up

Remove all Concresive® 1250 IUG from equipment and tools using acetone or other solvents. Follow proper waste disposal methods for solvents. Cured resin is inert; dispose of it by standard means.

For Best Performance

- Concresive® 1250 IUG is sensitive to moisture and somewhat sensitive to elevated temperatures. Product should be stored in dry conditions less than 80° F (27° C) and ideally between 40 and 60° F (4 and 16° C). The shelf life is significantly reduced once the container is opened.
- 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

CONCREACTIVE® 1250 IUG RESIN

Danger-Corrosive

Contains aliphatic amine, dibutyl phthalate.

Risks

Harmful if inhaled. May cause lung irritation and allergic respiratory reaction. Lung sensitizer. May cause eye irritation. May cause skin irritation. Harmful if swallowed. Refer to Material Safety Data Sheet (MSDS) for effects of repeated overexposure.

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. If swallowed, DO NOT induce vomiting. Have victim drink water if conscious. DO NOT give anything to an unconscious person. Obtain medical attention immediately.

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 knowingly 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.

CONCREACTIVE® 1200 SERIES ACCELERATOR

Caution

Risks

Harmful if inhaled. May cause lung irritation. Causes eye burns and skin irritation. Harmful if swallowed.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Use with adequate ventilation. Avoid contact with skin, eyes 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.

**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. 1019956 7/07

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

© 2007 BASF

Printed in U.S.A.