

PRODUCT DATA

3 03 01 00 **Maintenance of Concrete**

CONCRESE[®] 1210 IUG

Ultra low-viscosity polyurethane injection resin for controlling water flow**Description**

Concresive[®] 1210 IUG is a one-component low-viscosity, 100% solids hydrophilic polyurethane injection resin. It is used to seal fine cracks and joints in concrete for water control. This resin reacts with water to form a closed-cell foam with high tensile strength and excellent adhesion and flexibility.

Yield

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

Packaging

5 gallon (19 L) pails filled and sealed with a dry nitrogen blanket

Shelf Life

1 year when properly stored

Storage

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

Features

- Hydrophilic
- Installs with single- or plural-component injection equipment
- Low viscosity
- Flexible in cured state
- Polyurethane resins

Benefits

- Reacts with water in fissures for complete filling
- Versatile installation methods
- Excellent penetration of fine fissures
- Withstands thermal expansion and contraction, wet/dry and freeze/thaw cycles, crack movement
- Excellent resistance to fungi, gasses, and chemicals

Where to Use

APPLICATION

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

LOCATION

- Horizontal and vertical surfaces
- Interior and exterior

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.

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 – 17.2 MPa), depending on crack thickness, concrete thickness, and contamination. Re-inject water into the crack to cure resin left behind in the drill hole.

Technical Data

Composition

Concrecive® 1210 IUG is a one-component, low-viscosity 100% solids polyurethane resin.

Typical Properties

Uncured

PROPERTY	VALUE
Solids, %	100
Viscosity, cps (depending on temp)	400 – 600
Color	Light brown
Density, lbs/gallon (kg/L)	9.2 (1.1)
Flash Point, ° F (° C)	> 220 (102)
Corrosiveness	Noncorrosive
Reaction time, seconds, at 80° F (27° C)	75 – 90

Cured*

PROPERTY	VALUE
Tensile strength, psi (MPa) (ASTM D 3574)	150 – 400
Elongation, % (ASTM D 3574)	400 – 1,200
Toxicity	Nontoxic

*Cured properties are approximate. Ultimate properties will depend upon the amount of water reacted with the product.

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

Clean Up

After completing the pumping operation, use acetone or other solvents to clean all surfaces and equipment. Follow proper waste-disposal methods for solvents. Cured resin is inert; dispose of it by standard means.

For Best Performance

- Do not use epoxy injection techniques or hardware.
- Concrecive® 1210 IUG is sensitive to moisture and somewhat sensitive to elevated temperatures. Store product in dry conditions less than 80° F (27° C) and ideally between 40 and 60° F (4 and 16° C). Containers are shipped with a nitrogen blanket on the resin. 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

CONCRECIVE® 1210 IUG

Caution

CONTAINS: methylene bisphenyl diisocyanate, 2,4-toluenediisocyanate, 2,6-toluenediisocyanate, dimethyl succinate, dimethyl glutarate, dimethyl adipate.

Risks

Severe skin and eye irritant. Causes respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation of mouth, throat and stomach with nausea and abdominal pain.

Precautions

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

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 contains materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents.

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

BASF Construction Chemicals, LLC – Building Systems

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