



The Chemical Company

CONCRECRESIVE® 1288

Polyurethane Injection resin for control of water leaks

DESCRIPTION

CONCRECRESIVE 1288 is a two component system consisting of a urethane pre-polymer and a catalyst, which when injected into leaking joints and cracks reacts instantaneously with water to foam up and plug the leakage.

RECOMMENDED FOR

CONCRECRESIVE 1288 is ideally used in situations where the live leaks must be stopped before starting further repair works. Applications include ;

- Stopping leaks through joints and cracks in concrete and masonry.
- Stopping leaking water in tunnels, subways, basement and sheet pile walls as a precursor to other treatments.
- Injection into the joints of leaking water pipe line, concrete lined waterways, sewer lines and manhole conduits.
- Arrest water leakage through joints and cracks

FEATURES & BENEFITS

Foams in contact with water	Swells and seals against the passage of water. Stops live leaks.
Low viscosity	Effective penetration even in narrow cracks.
Forms flexible, tough foam	Withstands normal movements. Will not cause further concrete cracking.

PERFORMANCE DATA

Gel time : The gel time of the injection system can be adjusted to a given flow rate of leaking water by varying the catalyst content.

Typical gel times at different catalyst content are :

Dosage of Part B (Catalyst)	Gel time (sec.)
4 %	130
8%	70
12%	50
16%	40

PROPERTIES

	Part A	Part B
Supply form	Liquid	Liquid
Colour	Brown	Clear
Viscosity @ 25°C	300 cps	20 - 30 cps
Density	1.12 - 1.14 kg/L	0.93 - 0.95 kg/L
Pot life at 20°C	: 45-60 min.	

APPLICATION

Preparation

Best results are achieved by injecting from the face where water enters the structural element. Therefore, it is recommended to drill injection holes on this face. Where water entry side of the structure is inaccessible, drill holes on the leaking face, at an angle of max. 45° to the plane of the crack or joint, to intercept it as far behind the leaking face as practicable.

Drill approx. 15 mm dia holes, at intervals of 150 - 300 mm depending on the severity of the leakage.

Fix injection ports in each of the drilled holes using CONCRECRESIVE 1438 or CONCRECRESIVE 1488.

Flush the holes free from drilling dust by pumping water through each of the injection ports in succession and then close the cocks of the ports.

Mixing

Before mixing, it is important to establish the best gel time for a specific application, considering the velocity and rate of leaking water involved. The proportion of Part B determines the gel time. Tests should be conducted with different ratios of Part A to Part B, to ascertain the proportion of Part B required to achieve the desired gel time.

Test : Mix 100 parts of Part A with say 10 parts of part B. Add 20 parts of water and mix using a stirrer. Measure gel time from the moment of adding water. Repeat the test with different dosage rates of Part B. Choose the dosage of Part B that results in the desired gel time

Mechanical mixing is necessary. Use a slow speed electric drill fitted with a grout stirrer.

Pour Part A into a dry and clean container. Add the required quantity of Part B and mix for 1-2 min.

Placing

CONCRECRESIVE 1288 is designed for placing by injection using any positive displacement electric pump or a hand operated piston pump, capable of producing pressures up to 200 bars.

Inject the mixed resin system into the crack or joint starting from the widest part. In vertical cracks, start from the lowest level. Inject in each port keeping the next one open as a vent but all others closed. Normally, water emerges out of the vent port first, followed by foam.

When foam starts to appear, close the vent port and continue injection until the pressure is built up to the required level. Maintain the pressure for 1 to 5 minutes to allow for total penetration and close the injecting port before releasing the pressure. Continue until all the ports or nipples are injected.

24 hours after the injection, remove all nipples or ports and fill in the resulting cavities with CONCRECRESIVE 1438.

CONCRECIVE[®] 1288

EQUIPMENT

Drilling : Portable hammer drill capable of drilling up to 20 mm diameter holes.

Mixing : Slow speed portable electric drill fitted with a grout stirrer.

Placing : Hand operated piston type pump or electric positive displacement pump, capable of producing a pressure of up to 200 bars.

CLEANING

Clean the tools and equipment with a suitable solvent such as methylene chloride. Ensure that it is **not** contaminated with water.

ESTIMATING

The quantity of **CONCRECIVE 1288** required is dependent on the total volume of the void to be injected, loss and wastage.

PACKAGING

Available in 27.5 kg packs, consisting of 25 kg of Part A and 2.5 kg of Part B.

STORAGE

CONCRECIVE 1288 should be stored in a well ventilated warehouse at temperatures between 10°C and 30°C and protected from rain and humidity. Partially used drums should be resealed quickly to minimise ingress of moisture.

SHELF LIFE

CONCRECIVE 1288 can be kept for 6 months in unopened original packing, when stored as recommended.

PRECAUTIONS

Health : Certain components of **CONCRECIVE 1288** can cause skin and eye irritation if exposed and respiratory reaction if inhaled. Wear gloves, masks and use barrier creams while handling the product.

Fire : **CONCRECIVE 1288** is combustible.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** from our office or our website.

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STATEMENT OF RESPONSIBILITY

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NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **BASF Construction Chemicals**, are responsible for carrying out procedures appropriate to a specific application.

BASF Construction Chemicals offices in ASEAN

Singapore

Tel: +65-6861-6766

Fax: +65-6861-3186

Malaysia

Tel: +60-3-5628-3888

Fax: +60-3-5628-3776

Indonesia

Tel: +62-21-526-2481

Fax: +62-21-526-2541

Thailand

Tel: +66-2-664-9222

Fax: +66-2-664-9267

Vietnam

Tel: +84-650-374-3100

Fax: +84-650-374-3200

Philippines

Tel: +63-2-811-8000

Fax: +63-2-838-1025

Website: www.ap.cc.basf.com