



REACT

CRACK HEALING ACCELERATOR

Concrete Waterproofing

Description

Xypex is a unique chemical treatment for the waterproofing, protection and repair of concrete. XYPEX React consists of cement, sand and active proprietary chemicals specially designed to compliment Xypex Admix to accelerate static crack healing in critical applications. It is applied as a cementitious slurry to the pre-saturated surface of cracks less than 0.5mm in above and below-grade structures. The active chemicals are designed to diffuse into the substrate and react with Xypex Admix to cause a catalytic reaction. This reaction generates accelerates Xypex's proven performance for projects that require an accelerated time line for crack healing, permanently sealing the concrete and preventing the penetration of water and other liquids from any direction, even under high hydrostatic pressure.

Recommended for:

- Reservoirs
- Sewage and Water Treatment Plants
- Underground Vaults
- Secondary Containment Structures
- Foundations
- Tunnels and Subway Systems
- Swimming Pools
- Parking Structures

Advantages

- Resists extreme hydrostatic pressure
- Becomes an integral part of the substrate
- Quickly heals static hairline cracks up to 0.5 mm
- Can be applied to the positive or the negative side of the concrete surface
- Allows concrete to breathe
- Highly resistant to aggressive chemicals
- Non-toxic / no VOCs
- Does not require a dry surface
- Cannot puncture, tear or come apart at the seams
- No costly surface priming or leveling prior to application
- Does not require sealing, lapping and finishing of seams at corners, edges or between membranes
- Does not require protection during backfilling or during placement of steel, wire mesh or other materials
- Less costly to apply than most other methods
- Not subject to deterioration
- Permanent

For assistance with project requirements, please contact Xypex Technical Services Department.

Packaging

Xypex React is available in 50 lb. (22.7 kg) and 44.1 lb. (20 Kg) pails.

Storage

Xypex products must be stored dry at a minimum temperature of 45°F (7°C). Shelf life is two years when properly stored.

Coverage

For normal surface conditions, the coverage rate for each Xypex coat is 6 - 7.2 sq. ft./lb. (1.25 - 1.5 lb./sq. yd. or 0.65 - 0.8 kg/m²) of powder.

Application Procedures

1. SURFACE PREPARATION Concrete surfaces to be treated must be clean and free of laitance, dirt, film, paint, coating or other foreign matter. Surfaces must also have an open capillary system to provide "tooth and suction" for the Xypex treatment. A CSP-3 per the International Concrete Repair Institute Guidelines and Surface Profile Chips is recommended. If surface is too smooth (e.g. where steel forms are used) or covered with excess form oil or other foreign matter, the concrete should be lightly sandblasted, waterblasted, or etched with muriatic (HCL) acid.

2. STRUCTURAL REPAIRS – PRIOR TO COATING APPLICATION For cracks larger than 1/64" (0.5 mm) or for actively leaking cracks the following repair procedures are recommended. Chip out cracks, faulty construction joints and other structural defects to a depth of 1.5 inches (37 mm) and a width of 1 inch (25 mm). A "V" shaped slot is not acceptable. The slot may be saw cut instead of chipped but ensure that the slot is dovetailed or otherwise shaped such that there will be mechanical interlock of materials placed into the slot at a later stage. Clean and wet the slot and apply a brush coat of Xypex Concentrate as described in steps 5 & 6 and allow to dry for 10 minutes. Fill cavity by tightly compressing Dry-Pac into the groove with pneumatic packing tool or with hammer and wood block.

NOTE:

i. Areas of poor concrete consolidation that show evidence of leakage should also be repaired.

ii. Against a direct flow of water (leakage) or where there is excess moisture due to seepage, use Xypex Patch'n Plug, then Xypex Dry-Pac followed by a brush coat of Xypex Concentrate.

iii. For expansion joints or chronic moving cracks, flexible materials such as expansion joint sealants should be used.

3. WETTING CONCRETE Xypex requires a saturated surface dry (SSD) condition. Concrete surfaces must be thoroughly saturated with clean water prior to the application so as to aid the diffusion of the Xypex chemistry and to ensure growth of the crystalline formation deep within the pores of the concrete. Remove excess water before the application such that there is no glistening water on the surface. If concrete dries out before application, it must be re-wetted.

4. MIXING FOR SLURRY COAT Mix Xypex powder with clean water to a creamy consistency in the following proportions:

For Brush Application

1.25 - 1.5 lb./sq. yd. (0.65 - 0.8 kg/m²) of powder
5 parts powder to 2 parts water

Do not mix more Xypex material than can be applied in 20 minutes. As the mixture thickens, stir briefly to ensure mixture remains fluid; but do not add water.

5. APPLYING XYPEX Apply Xypex with a semi-stiff nylon bristle brush. The coating must be uniformly applied and should be just under 1/16 in. (1.25 mm). The Xypex treatment must not be applied under rainy conditions or when ambient temperature is below 40°F (4°C). For recommended equipment, contact Xypex's Technical Services Department or your local Xypex Representative.

6. CURING Generally a misty fog spray of clean water is used for curing the Xypex treatment. Curing should begin as soon as the Xypex has set to the point where it will not be damaged by a fine spray of water. Under normal conditions, it is sufficient to spray Xypex-treated surfaces three times per day for two to three days. In hot or arid climates, spraying may be required more frequently. During the curing period, the coating must be protected from rainfall, frost, wind, the puddling of water and temperatures below 36°F (2°C) for a period of not less than 48 hours after application. If plastic sheeting is used as protection, it must be raised off the Xypex to allow the coating to breathe.

NOTE:

i. For concrete structures that hold liquids (e.g. reservoirs, swimming pools, tanks, etc.), Xypex should be cured for three days and allowed to set for 12 days (18 days for waste water or corrosive solutions) before filling the structure with liquid.

ii. If any other cementitious system is applied over the Xypex coating, it should be after the coating has completely set but while it is still green (12 to 48 hours); the 12 to 24 hour window is considered ideal. For

installations onto a Xypex coating older than 48 hours contact your local Xypex Representative regarding surface preparation and application recommendations. Xypex Chemical Corporation makes no representations or warranties regarding the compatibility of Xypex products with plasters, stuccos, tiles and other surface-applied materials. Prior to the installation, it is recommended that a test section be completed under anticipated ambient and project conditions to demonstrate acceptable bond.

Technical Services

For more instructions, alternative application methods, or information concerning the compatibility of the Xypex treatment with other products or technologies, contact the Technical Services Department of Xypex Chemical Corporation or your local Xypex Representative.

Safe Handling Information

Xypex is alkaline. As a cementitious powder or mixture, Xypex may cause significant skin and eye irritation. Directions for treating these problems are clearly detailed on all Xypex pails and packaging. The Manufacturer also maintains comprehensive and up-to-date Safety Data Sheets on all its products. Each sheet contains health and safety information for the protection of workers and customers. The Manufacturer recommends you contact Xypex Chemical Corporation or your local Xypex Representative to obtain copies of Safety Data Sheets prior to product storage or use.

Warranty

The Manufacturer warrants that the products manufactured by it shall be free from material defects and will be consistent with its normal high quality. Should any of the products be proven defective, the liability to the Manufacturer shall be limited to replacement of the product ex factory. The Manufacturer makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties expressed or implied. The user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith.



Certified to NSF/ANSI/CAN 61



13731 Mayfield Place, Richmond, BC, Canada V6V 2G9 Toll-free: 1.800.961.4477
Tel: 604.273.5265 Fax: 604.270.0451 E-mail: info@xypex.com Web: www.xypex.com
XYPEX is a registered trademark of Xypex Chemical Corporation. Copyright © 1975-2026 Xypex Chemical Corporation.

