

CONCRESlVE® 1230

Low viscosity urethane injection resin with NSF approval

DESCRIPTION:

CONCRESlVE®1230 one component, polyurethane injection resin is designed for sealing water leaks in concrete structures due to cracks, rock pockets or joints by forming a resilient and flexible gasket or plug. This resin reacts with water to form a high tensile strength, closed cell foam with excellent adhesion and flexibility. Required rate of expansion and reaction to water can be altered by temperature or the amount of accelerator used.

RECOMMENDED FOR:

Sealing leaking cracks and joints in concrete and other masonry structures

FEATURES/BENEFITS:

- Tested by UL and approved by NSF
- Accelerator enhanced for variable reaction time
- Essentially unaffected by corrosive environments
- Cured resin withstands thermal expansion/contraction, wet/dry cycles, freeze/thaw cycles and crack movement without degradation
- Excellent resistance to fungi, gasses and chemicals normally found in soil and standard commercial structures
- Application using single or plural component injection equipment

PACKAGING/ESTIMATING:

CONCRESlVE 1230 system is packaged as one unit consisting of a 5 gal (19 L) pail with a large bung-type pour spout, filled and sealed under dry nitrogen, and a 0.2 gal (0.76 L) bottle of accelerator. Volume depends on mix ratio of water to resin and moisture in concrete and surrounding soil.

PERFORMANCE DATA:

Uncured 1230 Resin

Solids (ASTM D-1010)	100%
Viscosity (ASTM D-1638)	450 to 700 cps (depending on temp.)
Color	Pale yellow
Density (ASTM D-1638)	9.0 lb/gal (1.09 kg/L)
Flash Point (ASTM D-93)	Over 270 °F (132 °C)
Corrosiveness	Noncorrosive
Reaction Time (Depending on temperature and amount of accelerator used)	6 minutes to 20 to 30 seconds

Uncured 1230 Accelerator

Color	Clear liquid
Viscosity	5 cps at 68 °F (20 °C)
Flash Point	> 325 °F (163 °C)
Cured	
Tensile Strength (ASTM D412)	150 psi (1.03 MPa)
Elongation (ASTM D3574-91)	250%
Shrinkage (ASTM D1042)	<4%
Toxicity	Nontoxic

MIXING:

Mix the predetermined accelerator dosage with CONCRESlVE 1230 resin. See chart below to determine amount of accelerator required.

Reactivity (approximates)

Temp °F (°C)	% of activator used	Reaction time
50 (10)	1	8.0 min.
	3	3.5 min.
	5	2.5 min.
90 (32)	1	5.5 min.
	3	2.0 min.
	5	0.5 min.

NOTE: It is advisable to run a small test if time to gel is critical. Reaction or gel time can be adjusted using the accelerator provided.

The following information regarding application is provided as a brief overview. For detailed instructions before use of this product, consult the CONCRESlVE 1210, 1230 & 1250 Installation Bulletin.

APPLICATION:

Clean crack with a wire brush and seal surface with a sealing material (i.e. hydraulic cement - EMACO® 503, epoxy gel - CONCRESlVE Paste SPL, oakum rope soaked in CONCRESlVE 1230). Drill injection holes at a 45 degree angle to the surface of the concrete, intersecting the crack and penetrating the concrete through 1/2 its thickness. Space between injection ports should be equal to 1/2 the thickness of the concrete.

APPLICATION, continued:

Install injection ports or packers in 1/2 to 5/8 in. (13 to 16 mm) holes so that the top of the sleeve is just below the concrete surface. Flush both the cracked concrete and the injection equipment prior to pumping. Inject 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 to 2,500 psi (1.38 to 17.24 MPa) depending on crack thickness, concrete thickness and contamination. Reinject water into the crack to cure resin left behind in the drill hole.

Remove all CONCRESE 1230 material from equipment and tools using acetone or other solvents. Follow proper waste disposal methods for solvents. Cured resin is an inert material and can be disposed of by standard means.

LIMITATIONS:

- CONCRESE 1230 material 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.
- CONCRESE 1230 material should be installed when work areas are well ventilated. Avoid contact with eyes and repeated contact with the skin. Use of rubber gloves and safety face shield is recommended. Familiarization with MSDS guidelines is critical. Follow all procedures in the MSDS.

RELATED BULLETINS:

Material Safety Data Sheet — CONCRESE 1230
Installation Bulletin 6I12 #CP206 — CONCRESE 1210,
1230 & 1250
Specification Bulletin 6S12 #CP011 — CONCRESE 1210,
1230 & 1250

Master Builders, Inc. United States

23700 Chagrin Boulevard
Cleveland, Ohio 44122-5554
(800) MBT-9990
Fax (216) 831-6910

Canada

3637 Weston Road
Toronto, Ontario M9L 1W1
(800) 387-5862
Fax (416) 741-7925

Mexico

Bld. M. Avila Camacho 80, 3er Piso
53390 Naucalpan, México
011-525-557-5544
Fax 011-525-395-7903