

TECHNICAL DATA SHEET

DESCRIPTION

Pro-Poxy 50 is a 100% solids, high modulus, moisture tolerant, very low viscosity epoxy adhesive for gravity feed or pressure injection of cracks in concrete. The Pro-Poxy 50 meets the requirements of ASTM C-881 and AASHTO M-235.

USE

The Pro-Poxy 50 primary use is for pressure injection and gravity feed crack repair in concrete and masonry. Pro-Poxy 50 can also be used to seal interior slabs and exterior above-grade slabs.

FEATURES

- High modulus, high strength adhesive meeting ASTM C-881/AASHTO M-235
- Super low viscosity, for deep penetration
- Moisture tolerant
- V.O.C. Compliant
- Packaged in cartridges and gallon units
- High chemical resistance

PROPERTIES

Meets ASTM C-881/AASHTO M-235, Types I, II, IV, V, Grade 1, Classes B & C

Mix ratio 2:1, Part A to Part B by volume

Color (mixed) Amber

Viscosity (ASTM D-2393) 135 cps

Gel times 60 gm mass
33 Minutes @ 73°F (23°C)

Compressive yield strength (ASTM D-695)
7 days 11,000 psi (75.8 MPa)

Compressive Modulus (ASTM D-695)
220,000 psi (1,516.8 MPa)

Concrete bond strength (ASTM C-882)
2 days: 2,300 psi (15.9 MPa)
14 days 3,500psi (24.1 MPa)

Tensile Strength (ASTM D-638)
Greater than 7,000 psi (48.3 MPa)

Elongation at break (ASTM D-638) 2.9%

Water Absorption (ASTM D-570) 0.72%

Heat Deflection (ASTM D-648)
122 Degrees F (50 C)

VOC

Pro-Poxy 50 has a VOC content of 0 g/L . Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB

Packaging

PRODUCT CODE	PACKAGE	SIZE	
		Gallons	Liters
140013	Cartridge	0.11	400 ml
140004	Unit	1	3.79
140007	Unit	3	11.36
140018	Unit	15	56.78

STORAGE

The material should be stored at 40° -95°F (5°-35°C). Shelf life of properly stored, unopened containers is 24 months and 12 months for cartridges.

APPLICATION

Surface Preparation:

Cracks to be bonded must be clean and sound. Remove all dirt, grease, oil, and other foreign material that may prevent a good bond. The crack may be damp or dry, but free of standing water. Use clean, oil free, compressed air to blow out any remaining dust or debris prior to installation. Air, material, and surface temperature must be 40°F (5°C) and rising prior to mixing or installation.

Mixing:

Condition material to 65°- 85°F (18°- 29°C) before using. Premix each component separately then mix two parts by volume of Part A with one part by volume of Part B for three minutes with a low speed (< 450 rpm) drill motor using a jiffy mixer or paddle. Mix only as much material as can be used within the pot life.

Placement:

For pressure injection, first prepare the surfaces adjacent to the cracks to expose clean, sound concrete. The injection ports should be spaced from 8 in. (20.3 cm) to 36 in. (91.4 cm) apart depending on the crack width and the thickness of the member to be injected. Next, the crack should be sealed at the surface with Pro-Poxy™ 300 or 300 Fast. After the Pro-Poxy™ 300 or 300 Fast has cured, inject Pro-Poxy™ 50 epoxy with pressurized dispensing equipment or use the Pro-Poxy™ 50 cartridges. Pro-Poxy™ 50 cartridges are only designed for small repair projects with cracks at least 1/16 in. (1.6 mm) in width or larger. For large projects and/or crack widths less than 1/16 in. (1.6mm), use Pro-Poxy™ 50 in 1.5 or 3 gal. (5.68 or 11.36 L) units with automated dispensing equipment.

CLEAN UP

Tools and Equipment: Clean before the epoxy sets up. Use Xylene or the Unitex Citrus Cleaner.

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LIMITATIONS**FOR PROFESSIONAL USE ONLY**

Minimum age of concrete must be 21-28 days from date of placement depending on curing and drying conditions. Always test a small amount to insure that the product is mixed properly and thoroughly and that the material will harden properly before proceeding with the installation. Do not inject cracks wider than ¼ in. (6.4 mm) without contacting Dayton Superior. At the completion of each project, it is recommended to take core samples to verify the satisfactory penetration of the Pro-Poxy 50 into the crack. Do not thin with any solvents. Surface, ambient air, and material temperatures must be 40°F (5°C) or above. Do not expose stored or uncured product to cold or freezing temperatures below 35°F (2°C) for any length of time. Note: High temperatures will accelerate the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10° to 15° increase in temperature above 75°F (24°C).

PRECAUTIONS**READ SDS PRIOR TO USING PRODUCT**

- Component A – Irritant
- Component B – Corrosive
- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements
- Cured epoxy resins are innocuous

MANUFACTURER

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WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. **THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.**

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.