TECHNICAL DATA SHEET

DESCRIPTION
Pro-Poxy 100 is a 100% solids, high modulus, moisture tolerant, low viscosity epoxy adhesive for gravity feed or pressure injection of cracks in concrete. Pro-Poxy 100 is perfect for gravity-feed repair of fine to medium size cracks.

USE
The primary use of the Pro-Poxy 100 is for pressure injection and gravity feed crack repair in concrete and masonry in approximately 1/8 in. to 1/4 in. (3.2 mm to 6.4 mm) width cracks. Pro-Poxy 100 can also be used to seal interior slabs and exterior above-grade slabs.

FEATURES
- High modulus, high strength adhesive
- Low viscosity, for deep penetration
- Moisture tolerant
- V.O.C. Compliant
- Packaged in cartridges and gallon units
- High chemical resistance
- UL Certified – Drinking Water System Components to NSF/ANSI 61

PROPERTIES
ASTM C881 / AASHTO M235 Type I, II*, IV & V* Grade 1 Class C. * With exceptions. See Appendix A

voc
Pro-Poxy 100 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/OZ	Liters
140070	Cartridge	13.5 oz	400 ml
140048	Unit	1	3.8
140054	Unit	3	11.7
140062	Unit	165	624.6

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

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
1. Shake the cartridge vigorously for 60 seconds, then stand cartridge upright for at least 1 minute allowing any bubbles to rise to the top.

2. Insert cartridge into the dispenser. Make sure it is properly positioned with the shoulder of the cartridge flush with the front/top bracket of the dispenser. Point upward at about a 45° angle. Remove the plastic cap and plug from the top of the cartridge.

3. Continue to point the upward away from yourself and others while slowly applying pressure to dispenser moving any bubbles and product up through the nozzle until it reaches the tip. Dispense this first full stroke of material into disposable container. The cartridge is now purged and ready for flow restrictor installation.

4. Find the flow control inside the threaded end of the mixing nozzle attached to a tape strip. Insert flow control into the two holes at the top of the cartridge where the product comes out. Make sure it is securely seated in place. Install mixing nozzle onto cartridge. Holding the dispenser straight up, slowly apply pressure to the dispenser moving any bubbles and product up through the nozzle until it reaches the tip. Tilting only slightly, dispense this first full stroke of material into a disposable container.

5. Schedule dispensing to consume an entire cartridge at one time with no interruption of flow to prevent material from hardening in mixing nozzle. If problems arise during dispensing product, replace the nozzle; the product may have begun to cure in the nozzle which will affect the mix ratio. Never transfer a used nozzle to a new cartridge. Repeat the cartridge balancing steps listed above after replacing the nozzle.

Mix thoroughly with a low speed drill (400 – 600 rpm) with a mix paddle attachment (i.e. Jiffy Mixer). Carefully scrape the sides and the bottom of the container while mixing. Keep the paddle below the surface of the material to avoid entrapping air. Proper mixing will take at least 3 minutes. For bulk, mix only enough product that 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 Sure Anchor J51 or Pro-Poxy 300 Fast epoxy gel. After the epoxy gel has cured, inject Pro-Poxy 100 with pressurized dispensing equipment or use cartridges from Unitex. Do not install ports at the extremities of fine cracks as they feather to disappearance, install a terminal port approximately 4 in. from the end.

Narrow cracks fill quicker from a wider adjacent crack segment than from a surface port. Pro-Poxy 100 cartridges are only designed for fine to medium size cracks of approximately 1/8 in. to 1/4 in. (3.2 mm to 6.4 mm).

For sealing slabs, spread the Pro-Poxy 100 over the interior slab or above grade exterior slab. Allow material to penetrate then remove any excess material to prevent the formation of a surface film

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

LIMITATIONS

FOR PROFESSIONAL USE ONLY
Minimum age of concrete must be 21-28 days from date of placemen depending on curing and drying conditions. Do not thin with solvents, as this may prevent cure. Not intended to repair cracks subject to movement. Product not designed to stop seeping or flowing water, however it may be applied in moist or damp environments as long as standing water is removed.

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.

At the completion of each project, it is recommended to take core samples to verify the satisfactory penetration of Pro-oxy 100 epoxy into the crack
Do not thin with any solvents
Surface, ambient 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)
This product is certified to a maximum surface area to volume ratio of 0.8 sq. cm/L

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

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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.

Appendix A

TABLE 1: Pro-Poxy 100 Performance to ASTM C881-15[1,2,3]

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature Class C 60 °F (16 °C)
Gel Time – 60 Gram Mass[4]	----	C881	Min	27
Pot Life[5] (1 gallon)	----	C881	Min	19
Compressive Yield Strength	7 day	D695	PSI (MPa)	10,150 (70.0)
Compressive Modulus			PSI (MPa)	300,000 (2,068)
Viscosity	----	C881	cP	500
Bond Strength Hardened to Hardened Concrete	2 day	C882	PSI (MPa)	1,580 (10.9)
	14 Day		PSI (MPa)	2,950 (20.3)
Bond Strength Fresh to Hardened Concrete			PSI (MPa)	1,720 (11.9)
Heat Deflection Temperature	7 days	D648	°F (°C)	120 (48.9)
Water Absorption	24 Hours	D570	%	0.3
Linear Coefficient of Shrinkage	----	D2566	%	0.0003
Tensile Strength	7 day	D638	PSI (MPa)	7,230 (49.8)
Tensile Elongation	7 day	D638	%	4.4

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.
2. Full cure is listed above to obtain the given properties for each product characteristic.
3. Results may vary due to environmental factors such as temperature, moisture and type of substrate.
4. Gel time may be lower than the minimum required for ASTM C881.
5. Pot life is measured as the workable and applicable time of 1.0 gallon (3.8 L) when mixed.

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