

TECHNICAL DATA SHEET

DESCRIPTION

The Pro-Poxy™ 2000 Deep Pour is a matched system of blended aggregates and pre-measured 100% solids epoxy, designed to provide a non-shrink, high-performance, epoxy machine grout for the support of heavy equipment. Applications ¾ (1.9 cm) to 18 inches (45.7 cm) can be accomplished with Pro-Poxy™ 2000 Deep Pour. Placements greater than 18 inches (45.7 cm) can also be accomplished when properly extended with pea gravel extension. Pro-Poxy™ 2000 Deep Pour exhibits excellent flow and high bearing support when properly mixed and installed.

USE

Pro-Poxy™ 2000 Deep Pour can be used for anchor bolts and sleeves, supporting pumps, mill tables, crushers, crane rails, engines, compressors, rotary equipment and other heavy machinery requiring a stable and energy absorbing base subject to dynamic loads to maintain precision alignment.

FEATURES

- High early strength
- Excellent flow
- 1.5 Hours working time @ 75°F (24°C)
- Very low exotherm allows for deep placements
- High impact resistance
- Superior creep resistance
- Excellent chemical resistance
- Tenacious adhesion to concrete and steel.

PROPERTIES

ASTM C-579 Compressive Strength
12,000 psi (82.7 MPa)
 ASTM C-579 Compressive Modulus
2,000,000 psi (13789.5 MPa)
 ASTM C-1181 Compressive Creep
(400 psi, 140°F) <0.005 in/in
 ASTM C-307 Tensile Strength 2,000 psi (13.8 MPa)
 ASTM C-307 Tensile Modulus of Elasticity
1,900,000 psi (13100 MPa)
 ASTM C-580 Flexural Strength 3,000 psi (20.7 MPa)
 ASTM C-882 Bond Strength 3,000 psi (20.7 MPa)
 ASTM C-884 Thermal Compatibility Pass
 ASTM D-2471 Gel Time 300 minutes
 ASTM D-2471 Peak Exothermic 950F (35°C)
 ASTM C-531 Linear Shrinkage on cure 0.005%
 ASTM C-531 Coefficient of Thermal Expansion
Standard 20 x 10⁻⁶ in/in/°F
 ASTM D-2240 Shore D Hardness 93
 ASTM C-905 Density 144 lb/ft³ (2,300 kg/m³)

Pour Depth up to 18 inches deep in a single pour (45.7 cm)

Note:

The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to inter-laboratory precision and bias. When testing the field mixed material, other factors such as variations in mixing, temperature and curing conditions should be considered.

VOC

Pro-Poxy™ 2000 Deep Pour has a VOC of 0 g/L and therefore VOC compliant in all regulatory regions in Canada and the U.S., including U.S. EPA, SCAQMD, CARB, LADCO and OTC.

Estimating Guide

2 cu ft / .057 cu.m Unit (280 lb / 127 kg)
 Component A – 5 gal / 18.9 L pail
 Component B – 3 gal / 7.5 L pail
 Component C – (4) 60 lb / 27 kg bags

Packaging

Product	Product Code	Package	Size	
			Cu. ft.	Cu. m.
2000 Deep Pour	140385	Unit	2.0	0.057

STORAGE

Store in well ventilated area between 50° to 90°F (10° to 32°C). Resin (Part A) may crystallize if stored below 50°F (10°C). Shelf life is two years when stored unopened in original container.

Surface Preparation:

All mating surfaces for the proper bonding of grout shall be free of grease, oils, waxes, old epoxy and other impediments to adhesion. Concrete substrates shall be structurally sound, dry and should have a roughened profile resulting in an International Concrete Repair Institute (ICRI) Concrete Surface Profile (CSP) of between CSP # 2-3, or the texture of medium grit sandpaper to ensure maximum adhesion. Metal surfaces should be prepared to a SSPC-SP 6 Commercial Blast Cleaning Specification. Do not place on damp or otherwise green concrete. All steel surfaces exhibiting sharp edges should be smoothed or otherwise radiused prior to placement of the epoxy grout. Failure to smooth and or radius sharp edges may result in cracking. Items not intended to bond to grout, such as leveling screws, wedges and bolts, must be protected with wax, caulk, duct tape or similar products.

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Mixing

For best results, Part A-resin, B-hardener & C-aggregate should be pre-conditioned for at least 24 hours to at least 75°F (24°C) for ease of mixing and maximum flow. First premix components A & B separately then pour part B-hardener into Part A-resin and mix for a minimum of 3 minutes with a low speed mixer and avoid incorporation of air. Keep mixer below material line to avoid entrapping air in the mix. A Jiffy mixer is the preferred mixing paddle. Pour mixed liquids into a mortar mixer and add component C while mixer is running. Mix for a minimum of two minutes to thoroughly wet all aggregate. Do not over mix; do not thin or add any solvents or thinners. Working time after mixing is approximately 3 hours at 72°F (22°C). Do not mix partial units; mix only full units.

Forming

Forms must be securely anchored and liquid tight. All Forms should be coated with a minimum of two coats of paste wax such as "Johnson's" paste wax (car wax is not acceptable) or other suitable release agents. Forms should have a 45° angle chamfer strips at all vertical corners and around the perimeter of grout edges to eliminate all sharp edges and corners. Forms should be constructed so as to allow the use and placement of a head box to achieve a hydraulic head for ease of placement. Seal all cracks, crevices or any other places that may leak with a suitable caulk, sealant, or hydraulic cement.

NOTE: Large grouting areas may require expansion joints installed. Expansion joint material should be non-absorbent and chemical resistant such as Unitex Expansion joint. Expansion joints should be placed between 48-60" (1.22-1.52 m) depending on the design and specifications of the project.

For more details on placement and expansion joints spacing refer to the Unitex Epoxy Grout Guide. Unitex hard rubber Expansion Joint is available in 10' lengths (3.05 m).

Placement:

Open areas may be poured directly into the cavity from a pail. Use a head box when necessary to chase air from beneath base plates and sole plates to maintain a hydraulic head. Epoxy grouts are typically poured into the forms at one location to allow a uni-directional flow to displace air. Inspect forms frequently for leaks.

Pro-Poxy 2000 Deep Pour can be placed up to 18 inches (45.7 cm) neat at temperatures below 85°F. For deep pours and temperatures above 85°F contact Unitex technical service. Plug leaks with sealant, caulk, hydraulic cement, or putty.

Using Pro-Poxy 2000 Deep Pour with 3/8" (9.5 mm) pea gravel that is clean, dry, and conforms to ASTM C33: The use of pea gravel extension (4-50 lbs (22.7 kg) bags per 2 cu ft. (cu M) unit, increases the unit yield from 2 cu ft. to 3.4 cu ft. and reduces the Exotherm during cure. This system is designed to pour to a depth of up to 48" (1219.2mm) when flowability is not a consideration.

Mortar mixers are recommended for mixing when using pea gravel extension. First mix components A & B together for a minimum of 3 minutes. Once components A & B are mixed pour the material into a mortar mixer and add 1 bag of Part C. Start the mixer as slow as it will go and mix until all material is wetted. Continue to add the remaining 3 bags of part C and mix until fully wetted out. Now add three to four bags of the pea gravel to the mixer. Stop mixing once all aggregate is wetted out. Pour the material into buckets or other suitable containers and place it. Additional lifts can be done after previous pour is hard, typically within 24 hours.

Note: After forms have filled to the desired level, exposed horizontal surfaces of the grout may be finished using a suitable surfactant to reduce surface bubbling or foaming. Suitable surfactants are Unitex Citrus Cleaner, WD-40, xylene (xylo), and toluene. The surfactant should be lightly sprayed on the surface and gently brushed or trowled with a 2" wide plastic putty knife. Do not allow surfactant to puddle on surface. This may be performed every 25- 30 minutes until the grout has set hard.

Cure Time

Temperature	Working Time	Curing Time
55 °F/13 °C	7 hrs	72 hrs
65 °F/ 18 °C	5 hrs	60 hrs
75 °F/24 °C	3.5 hrs	48 hrs
85 °F/29 °C	2.5 hrs	36 hrs
95 °F/35 °C	1.5 hrs	24 hrs
100 °F/38 °C	1.0 hr	16 hrs

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CLEAN UP

The extended working time allows for easy soap & water clean up of tools mixers and work area while Pro-Poxy 2000 Deep Pour are in the plastic stage. For materials that have started to set, Unitex Citrus Cleaner, xylol, or other approved solvent may be used.

LIMITATIONS

FOR PROFESSIONAL USE ONLY

Do not thin with solvents

Do not mix less than a full unit

Always use all of the component C aggregate Product, surface and ambient temperatures must be at least 55°F (13°C) during, and at least 48 hours after, application.

Minimum age of concrete must be 21-28 days from date of placement depending on curing and drying conditions. For application with constant high temperatures above 150°F (66°C), contact Dayton Superior

Note: High temperatures will accelerate the setting time and low, cool temperatures will slow the setting time. As a general rule, the pot life of epoxy will be cut in half for each 10° to 15° increase in temperature above 75°F (24°C), the pot life will double for each 10° to 15° drop below 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.