UNISORB®
INSTALLATION SOLUTIONS

GB-0178-1.1, Rev. 8

BULK POUR V-100 EPOXY GROUT PRODUCT DATA

Unisorb Bulk Pour V-100 Epoxy Grout is a three component, 100% solids, VOC and BGE1 free, epoxy resin system designed specifically for pours up to 8" (20.3 cm). Bulk Pour Grout offers rapid strength development, flows easily into spaces under equipment, fills completely before solidifying and is self-leveling. It will survive impact and vibration equal to reinforced rubber materials and will not delaminate under the most severe shock loads. Bulk Pour can be made more flowable by using a four bag mix of aggregate.

Packaging/Yields:

Bulk Pour V-100 Epoxy Grout, 2.0 Cu. Ft. Kit (3,456.0 Cu. In.)
Bulk Pour V-100 Epoxy Grout, 1.7 Cu. Ft. Kit (2,937.6 Cu. In.)
Bulk Pour V-100 Epoxy Grout, 0.43 Cu. Ft. Kit (743.0 Cu. In.)

- Meets requirements for "High" effective bearing area per ASTM C-1339.
- 10,185 psi compressive strength in 8 hours.
  14,020 psi compressive strength in 24 hours.
- Easy mixing - no special mixing equipment needed. Mix with drill and paddle or paddle type mortar mixer.
- Deep pours and large diameter holes can be done with multiple lifts.

Handling Properties	Value	
Maximum Depth of Pour	8"	
Working Time	45 min.	
Gel Time	50°F	8-10 hours
(ASTM D-2471)	72°F	90 min.
	90°F	60 min.

Physical Properties @ 72˚F (22˚C)			
		5 Bag Mix, 2.0 Cu. Ft. Kit	4 Bag Mix, 2.0 Cu. Ft. Kit 1 Bag Mix, 0.43 Cu. Ft. Kit
Compressive Strength			
(ASTM C-579)	8 hours	3,600 psi	3,800 psi
	16 hours	9,000 psi	9,150 psi
	1 day	14,510 psi	14,570 psi
	3 days	15,290 psi	16,530 psi
	7 days	15,870 psi	16,865 psi
(ASTM D-695)	Ultimate	16,220 psi	17,340 psi
Tensile Strength (ASTM D-638)		2,950 psi	2,950 psi
Elongation at Break (ASTM D-638)		0.66%	0.72%
Flexural Strength (ASTM D-790)		6,300 psi	6,600 psi
Heat Deflection Temperature (ASTM D-648)		136°F	136°F
Maximum Service Temperature		250°F	250°F
Coeficient of Thermal Expansion (ASTM C-531)		16.6 in./in./°F x 10^{-6}	16.6 in./in./°F x 10^{-6}
Linear Shrinkage (ASTM C-531)		0.009%	0.018%
Effective Bearing Area (ASTM C-1339)		≥ 95%	≥ 95%
Bond to Concrete (Concrete Failure) (ASTM C-882)		4,020 psi	3,600 psi
Adhesion to Steel (Clean, Blasted) (ASTM C-882)		2,500 psi	2,500 psi
Hardness, Shore D (ASTM D-2240)		92	93
Creep Test (ASTM C-1181)			
(400 psi @ 70°F)		0.7 x 10^{-3}	0.5 x 10^{-3}
(400 psi @ 140°F)		4.8 x 10^{-3}	3.6 x 10^{-3}
Peak Exotherm (1 lb. Mass) (ASTM D-2471)		82.0°F	88.0°F
Specific Weight, g/cm³ (ASTM D-792)		2.19	2.14
Early Height Change (ASTM D-827)		-1.02%	-3.66%

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CONCRETE SURFACE PREPARATION
Remove all oil, grease and contamination from concrete. Remove loose and weak concrete from the foundation surfaces. The concrete must be dry and have no standing water.

METAL SURFACE PREPARATION
Base plates or soleplates to be grouted should be clean and free of rust, dirt and other surface contaminates.

FORMING
Method of forming must provide for rapid continuous placement of grout. Adequate clearance for grout placement and head must be provided. Forms should be watertight and greased or waxed to allow easy removal.

PREPARATION OF EPOXY GROUT
All unmixed grout components (resin, hardener, and aggregate) must be stored inside a dry, temperature-controlled storage environment with an approximate temperature range of 75°F to 90°F until all three components exhibit temperatures within this range. This could take 24 to 72 hours depending on seasonal temperature conditions.

MIXING THREE PART EPOXY
Three part formulas contains resin, hardener and an aggregate. When ready to mix grout, pour the hardener into the resin container and mix with a paddle with a variable speed drill until thoroughly blended. Pour mixed resin and hardener into a larger container or paddle type mortar mixer (poly material preferred). Slowly add all of the aggregate until all surfaces become wet as it is mixed. Continue to mix until there are no dry streaks. Do not add water. Create a more flowable mixture by only using four bags of aggregate with the resin and hardner. The 4 Bag Mix, 1.7 Cu. Ft. and 5 Bag Mix, 2.0 Cu. Ft. Kits can be mixed in mortar mixer, while 0.43 Cu. Ft. Kit can be mixed in the supplied bucket.

POURING
Only pour grout from one side. This is to prevent the formation of air pockets under the equipment being grouted. Continue pouring until the grout has completely flowed to the other side of the equipment and to an adequate depth to eliminate potential voids. The grout will self-level under most circumstances but may need to be agitated, pushed, strapped, etc. to help the material flow under the equipment and properly self-level, especially in cold weather

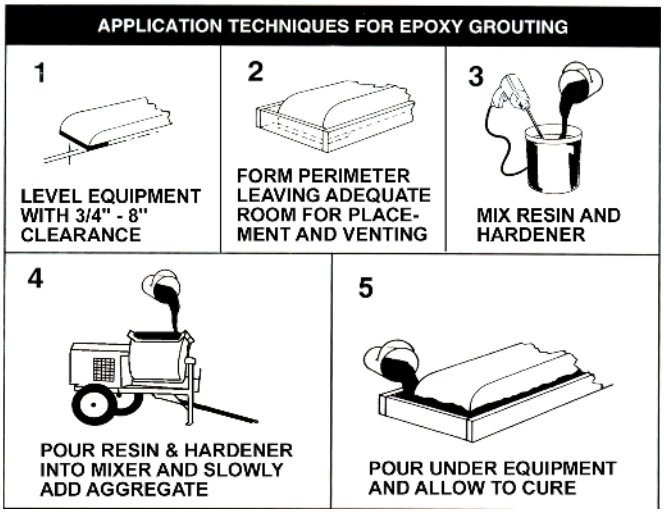
PLACEMENT TIME
The time you have before initial set depends on the air temperature, the ambient temperature of the foundation and equipment, and the temperature of the grout. In cooler conditions you will have more time to place the material, and in wamer temperatures you will have less time.

CURE TIME
The cure time (the time until the grout is strong enough for use) is temperature dependent. Special precautions must be taken when temperatures are below 70°F or above 90°F to assure the grout will properly cure. Consult the factory for details.

TEMPERATURE CONSIDERATIONS
The temperature of the kit components (resin, hardener, and aggregate) at the time of mixing and placement have a significant effect on ease of mixing, placement of the mixed grout, and strength development. For optimum results it is very important all three unmixed grout components are within the 75-90 degree F temperature range. It is recommended that the grouting environment also be preconditioned to a temperature range of 70°F to 95°F to assure predictable results.

CLEANUP
Uncured grout may be cleaned from tools and mixing equipment with a mild solvent, detergent, or pressurized water rinse. For best results, clean mixing equipment and tools immediately upon completion of mixing activities.

PRECAUTIONS
Always wear appropriate Personal Protective Equipment (PPE). SDS are available on our website at www.Unisorb.com. Avoid inhaling fumes and keep the work area well ventilated. Wash skin and clothes with soap and water immediately (before grout cures).



Physical properties shown are the result of laboratory testing performed per industry recognized test procedures. Laboratory properties aid in determining suitability of the product for the intended application. Field testing results may vary due to procedures or ambient conditions such as temperature and humidity. Laboratory reports are available on request.

Consult the specific Safety Data Sheets (SDS) for all safety data.

Contact Unisorb for all application questions and grouting support.

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