

TECHNICAL DATA SHEET

DESCRIPTION

Epoxy Grout J55 is a matched system of blended aggregates and pre-measured 100% solids, very low exotherm epoxy resin. When mixed, the result is a non-shrink grout that can be placed up to a maximum of 8 inches (20.3 cm) deep in a single pour resulting in a 95% bearing area when properly installed.

USE

Epoxy Grout J55 can be used for anchor bolts & 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 8 in. (20.3 cm) depth in single pour
- High impact resistance
- Superior creep resistance
- Excellent chemical resistance
- Tenacious adhesion to concrete & steel

PROPERTIES

Compressive Strength - ASTM C 579
 1 day cure @ 75°F = 10,000 psi (68.9 MPa)
 7 day cure @ 75°F = 14,500 psi (99.9 MPa)
 Compressive Modulus – ASTM C-579: 2,130,000 psi (14,690 MPa)

Modulus of Elasticity - ASTM C580: 1,250,000 psi (8,620 MPa)
 Tensile Strength – ASTM C 307: 2,400 psi (16.5 MPa)
 Tensile Modulus of Elasticity – ASTM C-307: 2,000,000 (13,793 MPa)
 Flexural Strength – ASTM C 580 = 3,100 psi (21.3 MPa)
 Bond Strength – ASTM C 882 = 3,500 psi (24.1 MPa)
 Linear Shrinkage on Cure - ASTM C 531 = 0.005%

Coefficient of Thermal Expansion – ASTM C 531 = 18 X 10⁻⁶ in/in/°F
 Hardness Shore D Scale - ASTM D 2240 = 95
 Density on Cure – ASTM C 905 = 144 lb/cu.ft. (2,300 kg/cu m)
 Placement Depth @ 75°F. = 8 inches (20.3 cm) maximum

VOC

J-55 has a VOC of 0 g/L and therefore VOC compliant in all regulatory regions in the U.S., including SCAQMD, LADCO and OTC.

ESTIMATING GUIDE

Epoxy Grout J55 is available in two size units, a Standard 0.5 cu. ft. and a 2.0 cu ft unit

PACKAGING

ITEM #	PACKAGE	SIZE	
		cu. ft.	(cu m)
309213	Unit	0.5	(0.014)
309214	Unit	2	(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.

APPLICATION

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 to maximize adhesion. Metal surfaces should be prepared to a SSPC-SP 6 Commercial Blast Cleaning Specification. Do not place on damp or otherwise green concrete.

Forming: Forms must be securely anchored and liquid tight. All areas that need to prevent bonding of the epoxy should be treated with wax or other suitable form release agent. Forms should have a 45° angle chamfer strips at all vertical corners and horizontal grout grade elevation 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.

Mixing: Condition all components A-resin, B-hardener & C- aggregate to greater than 75°F (24°C) for ease of mixing and maximum flow. First pre-mix each component separately then pour hardener and resin (Parts A & B) into the mixing pail container and mix thoroughly with a low speed mixer and avoid incorporation of air. Keep mixer at the bottom to avoid entrapping air in the mix. Pour mixed liquids into mortar mixer and add bagged materials (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 1.5 hours at 72°F (22°C). Do not mix partial units; mix only full units.

Placement: Open areas may be poured directly into the cavity from a wheelbarrow or other transport. Use a head box when necessary to chase air from beneath base plates and sole plates to maintain a hydraulic head. The grout should be poured into the forms at one location to allow a uni-directional flow to displace air. Inspect forms frequently for leaks. Do not exceed 8

inches (20.3 cm) maximum depth on placements. Plug leaks with sealant, caulk, hydraulic cement, or putty. Maintain proper curing temperatures after placement. Lower curing temperatures will affect the strength gain over time.

Curing: After forms have filled to the desired level, exposed horizontal surfaces of the grout may be finished using a suitable surfactant to reduce or eliminate foaming or surface bubbling. Suitable surfactants are xylene (xylol), toluene, or WD-40. The surfactant should be lightly sprayed on the surface and gently brushed or trowled out. Do not allow to puddle on surface. This may be performed every 25- 30 minutes until the grout has set hard.

Cure & Working Times

Temp	Working Time	Curing Time
50°F/10°C	4 hours	42 hours
75°F/24°C	1.5 hours	24 hours
95°F/35°C	45 minutes	12 hours

CLEAN UP

Clean all tools with xylene (xylol), toluene or Citrus Cleaner J48 before the epoxy sets. Mortar mixers can be cleaned using two bags of 1/4-3/8 in. (0.6 cm – 0.95 cm) pea gravel with glycol. The glycol may be used several times before disposal. All tools must be cleaned up before the grout has set hard.

LIMITATIONS

FOR PROFESSIONAL USE ONLY

Do not thin with solvents.

Product, surface and ambient temperatures must be 45°F(7°C) or above.

Concrete must be 28 days old.

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 MSDS 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.