

PRODUCT 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 from 1.0 cm up to a maximum of 20.3 cm deep in a single pour resulting in a 95% bearing area when properly installed.

BENEFITS

- High early strength
- Excellent flow
- 1.5 Hours working time @ 24°C
- Very low exotherm allows for 203mm depth in single pour
- High impact resistance
- Superior creep resistance
- Excellent chemical resistance
- Tenacious adhesion to concrete and steel

AREAS OF APPLICATION

Epoxy Grout J55 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.

PROPERTIES

ASTM C-579

1 day cure @23 C = 68.9 MPa

7 day cure @ 23 C = 99.9 MPa

Compressive Modulus 14685.8 MPa Modulus of

Elasticity - ASTM C580: 8,620 MPa Tensile Strength –

ASTM C 307: 16.5 MPa Tensile Modulus of Elasticity

– ASTM C-307: 13,793 MPa Flexural Strength – ASTM

C 580 = 21.3 MPa

Bond Strength – ASTM C 882 = 24.1 MPa

Linear Shrinkage on Cure - ASTM C 531 = 0.005%

Coefficient of Thermal Expansion – ASTM C 531 =
18 X 10⁻⁶ in/°F

Hardness Shore D Scale - ASTM D 2240 = 95

Density on Cure – ASTM C 905 = 2,300 kg/cu m

VOC

J55 has a VOC of 0 g/L

ESTIMATING GUIDE

Epoxy Grout J55 is available in two size units, a standard 14L kit, and a 57L kit.

PACKAGING

| ITEM # | PACKAGE | SIZE |
|----------|-------------|-------------------------|
| 145459AU | 3 Component | 0.014 (m ³) |

STORAGE

Store in well ventilated area between 10Å° to 32Å°C. Resin (Part A) may crystallize if stored below 10Å°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 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.

MIXING

For best results, Part A-resin, B-hardener & C-aggregate should be pre-conditioned for at least 24 hours to at least 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 1.5 hours at 23°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. Expansion joints should be placed between 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 Epoxy Grout Guide.

PLACEMENTS

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 and 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 200mm 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. 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.

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 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.

CURE & WORKING TIMES

| TEMP | WORKING TIME | CURING TIME |
|------|--------------|-------------|
| 10°C | 4 hours | 42 hours |
| 24°C | 1.5 hours | 24 hours |
| 35°C | 45 minutes | 12 hours |

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 13°C during, and at least 48 hours after, application Concrete must be 28 days old.
For application with constant high temperatures above 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 24°C, the pot life will double for each 10° to 15° drop below 24°C.

PRECAUTIONS

READ SDS PRIOR TO USING THE PRODUCT

- Component A - Irritant
- Component B - Corrosive
- Product is a strong sensitiser
- 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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