

EPOGROUT HP

HIGH PERFORMANCE EPOXY GROUT SYSTEM



DESCRIPTION

EPOGROUT HP (high performance epoxy grout) is formulated from a new resin technology. Further, a proprietary aggregate blend has created a grout which exceeds all current performance standards. This product is characterized by low shrinkage, high bearing surface, low creep and excellent flowability. **EPOGROUT HP** is clearly the choice for the toughest and most demanding epoxy installations where bond to existing foundation and machinery is critical.

BASIC USES

- Turbines, compressors or stamping machines with static and dynamic loading.
- Industrial areas requiring maximum bond to foundation with maximum bearing.
- Quick re-grouts and start-ups.

FEATURES & BENEFITS

- Fast return to service.
- High chemical resistance.
- Excellent bond of machinery to foundation.
- Low shrinkage, low creep.
- Excellent bearing.
- Superior stability under elevated service temperatures of up to 105°C.

SPECIFICATIONS & COMPLIANCES

- **EPOGROUT HP** meets the requirements of ASTM C 307 Type I, Grade II, Class A.
- **EPO GROUT HP** meets the thermal compatibility with concrete requirements of ASTM C 884.

TECHNICAL INFORMATION

Typical Engineering Data

The following results were developed under laboratory conditions.

Compressive Strength

ASTM C-579 50 mm cubes

Age	Strength
24 hours	11,900 psi (82 MPa)
3 days	13,100 psi (90 MPa)
7 days	13,600 psi (94 MPa)
28 days	14,800 psi (102 MPa)

Creep Data, ASTM C-1181

3 days	1.9×10^{-4} in/in (1.9×10^{-4} mm/mm)
7 days	2.4×10^{-4} in/in (2.4×10^{-4} mm/mm)
28 days	3.6×10^{-4} in/in (3.6×10^{-4} mm/mm)
120 days	7.1×10^{-4} in/in (7.1×10^{-4} mm/mm)

Linear Shrinkage, ASTM C-531

3 days	0.003%
7 days	0.004%
14 days	0.008%

Coefficient of Thermal Expansion , ASTM C-531

2.0×10^{-5} in./in./°F (3.6×10^{-5} mm/mm/°C)

Bond to Concrete :

Exceeds tensile and shear strength of good grade concrete

Chemical Resistance :

ASTM D-543, excellent resistance to most chemicals. Specific recommendations available

Abrasion Resistance : Greater than concrete.

Flexural Strength , ASTM C 580

1 day	3,600 psi (25 MPa)
3 days	3,900 psi (27 MPa)
7 days	4,100 psi (28 MPa)
28 days	4,100 psi (28 MPa)

Modulus of Elasticity , ASTM C 580

1 day	1.2×10^6 Psi (8.5×10^3 MPa)
28 days	1.5×10^6 Psi (10.5×10^3 MPa)

Tensile Strength , ASTM C 307

1 day	1,900 Psi (13 MPa)
28 days	2,200 Psi (15 MPa)

Gel Time, ASTM D 2471

@ 23°C.....109 minutes

Peak Exotherm, ASTM D 2471

@ 23 - 47°C @ 126 minutes

Heat Deflection Temperature : (89°C)

DIRECTIONS FOR USE

Surface Preparation

New concrete must be a minimum of 28 days old. The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bushhammer, shotblast or scarifier which will give a surface profile of a minimum 3 mm and expose the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.

Acid etching is acceptable only when mechanical preparation is impractical. It is recommended that only contractors experienced in the acid etching process use this means of surface preparation. The salts of the reaction must be thoroughly pressure washed away. Allow the concrete to completely dry

Note

Even with proper procedures, an acid etched surface may not provide a bond as strong as using mechanical preparation procedures. All concrete must possess an open surface texture with all curing compounds and sealers removed.

YIELD	27 kg kit will yield approximately 0.014m ³ / 14 Liters 91 kg kit will yield approximately 0.0472m ³ / 47 Liters
PACKAGING	EPO GROUT HP is packed in 27 kg kit, 91 kg kit
COLOR	Available in Dove grey

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Data Sheet



PACKAGING INFORMATION

EPOGROUT HP	27 kg-kits	91 kg-kits
PART A	4	13.2
PART B	0.85	2.85
PART C	22.7	25 x 3

Form Preparation

Forms must be liquid tight to prevent leakage, and they should be strong and well braced. To facilitate stripping, the forms should be coated with two applications of paste wax or each piece wrapped with polythene. Anchor Bolt Holes and Blockouts - holes and blockouts should be cleaned of all dust, dirt and debris and allowed to dry. If the sides are smooth, roughen the hole with a stiff bristle wire brush or with a rotary bush hammer if access permits. mix parts A & B (resin & hardener) for 2minutes using a drill and mixing prop. For ease of mixing add the Part B to the Part A. The epoxy must be well mixed to ensure proper chemical reaction. After the epoxy has been mixed thoroughly, add the Part C slowly (aggregate) and mix for 2-3 minutes more until the aggregate is completely wetted out. For large jobs, use a mortar mixer for mixing. Place immediately.

Placement

Pour into anchor bolt holes and blockouts through a funnel or directly if space permits. When grouting the base plates, pour grout into the headbox and allow to flow under the plate. Straps pre-placed under the plate will aid in working the grout across. Grout should be placed at a minimum of 25 mm thick and a maximum 152 mm per lift when placed in a large mass. Higher temperatures will increase initial flow but cut down on working time. For more than 3m length of base plates, CMCI can be consulted.

Curing

EPOGROUT HP requires no special curing procedures.

Finish

If a smooth finish is desired, the surface of the grout may be brushed and troweled with a light application of CEMTEC SOLVENT.

CLEAN-UP

Tools and mixer may be cleaned with **CEMTEC SOLVENT, XYLENE**

PRECAUTIONS & LIMITATIONS

- Wear protective gloves and eye glasses when handling epoxies
- Do not use over frozen concrete
- Store material at room temperature before use
- Grout should be placed at ambient temperatures of 4-32°C
- Solvents used for clean-up are flammable, keep way from heat, sparks, open flame, or lit cigarettes. Use explosion-proof application equipments.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.

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