

A 3 COMPONENT HIGH STRENGTH, TEMPERATURE & FLOW EPOXY RESIN GROUT

DESCRIPTION

Condur EGHS is 3 component solvent free pourable high strength epoxy grout. The viscosity may be altered to specific applications by varying the quantity of component C used. Based on a highly sophisticated resin & hardener system, **Condur EGHS** provides excellent resistance in high temperature operating conditions this combined with its high strength & negligible shrinkage makes it ideal for installing critically aligned machinery.

USES & ADVANTAGES

Condur EGHS is used in the precision alignment of machinery in heavy industry such as compressors under ball mills, slab tables & other equipment in the gas & steel industry, in a wide variety of applications in the chemical, pulp & paper, mining & power industries where fast turnaround is required & high early & final strengths. When compared to cement grout. **Condur EGHS** has the following advantages :-

- Impervious to oil.
- Cures at least three times as quickly.
- No mixing ratios to measure.
- High physical strength.
- High impact strength.
- Resistance to many more chemicals.
- Strong bond to metal and concrete.
- Unaffected by weathering and freeze / thaw cycling.
- Stated physical properties assured.
- Superior resistance to fatigue.

Benefites include:-

- High chemical resistance.
- Solvent free no diluent.
- Shrinkage free hardening.
- Rapid hardening.
- Fast turn around.
- High early and seven day strengths.
- Superior physical properties at high temperatures.
- Excellent bearing area and flow.
- Variable fill ratio for the optimum mix of flowability, bearing area and economics on a project by project basis.
- Impact & vibration resistant.
- Can use in high temperatures

PROPERTIES

Components: 3 (Base, Hardener & Filler)

Form: Pourable

Appearance: Black (when mixed)

Mixed Density (kg/ltr): 2.25 ± 0.05

ASTM C905

Working Time: 25 - 40 mins.

Compressive Strength: 4 hrs 40 N/mm²

ASTM C579, Method B 1 day 95 N/mm²

7 days 118 N/mm²

Compressive Strength at Elevated Temperature*

25°C	55°C	80°C	120°C
118 N/mm ²	103 N/mm ²	81 N/mm ²	40 N/mm ²

* Cure 24 hrs at room temperature and then conditioned 24 hrs at test temperature.

Flexural Strength: 7 days 35 N/mm²
ASTM C580

Tensile Strength: 7 days 25 N/mm²
ASTM C307

Bond Strength: 7 days > 3 N/mm²
ASTM D4541 (concrete failure)

Chemical resistance (ASTM D543):

Citric Acid 10%	Excellent
Tartaric Acid 10%	Excellent
Acetic Acid 5%	Satisfactory
Nitric Acid 25%	Good
Hydrochloric Acid 25%	Excellent
Sulphuric Acid 50%	Very good
Sodium Hydroxide 50%	Excellent
Diesel Fuel / Petrol	Very good
Sugar Solutions	Very good
Lactic Acid	Very good
Hydrocarbons	Very good
Phosphoric Acid 50%	Very good

Application Temperature: +15°C to +40°C

Note: The above data is typical under laboratory conditions @25°C and does not constitute a specification. Field trials are recommended.

CHEMICAL RESISTANCE

Condur EGHS resists non oxidising mineral acids and salts, caustics, dilute oxidising acids and salts, plus some organic acids and solvents. Please refer to Cormix International Ltd. for more information.

SUBSTRATE PREPARATION

- New concrete needs to be 21 to 28 days fully cured or have a compressive strength of 21 MPa and tensile strength of 2.1 MPa. In order to ensure a good bond of epoxy to the concrete, check that hydration has ceased.
- The concrete should be chipped to remove all laitance and 50% of the aggregate exposed to provide a rough bonding surface for the epoxy. Dowels should be installed on new exposed concrete to prevent edge lifting.
- The concrete foundation should be dry and oil free before the pouring of grout.
- Form as for concrete using good quality form material. Fit 30 mm. x 45 mm. chamfer pieces. Wax or grease all surfaces of forming in contact with resin. Seal all gaps with suitable mastic or putty.
- Sleeve all foundation bolts in way of resin to prevent adhesion and to allow bolt stretch.
- Construct header boxes if resin has to flow more than one metre.
- All 90° angles on steelwork in contact with the epoxy should be rounded to reduce stress concentrations in the grout. Round shim stock is preferred.
- Surfaces of baseplates or soleplates in contact with grout should be sandblasted to a clean, oil free, dry surface. Epoxy primer can be applied to the clean metal surfaces to prevent rusting.

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MIXING

Thoroughly stir components A & B prior to mixing together. Use a drill mixer with speed max. 600 rpm. Mix for minimum of 1 minute and then slowly add the Part C. Mechanically mix for a further 2 minutes or until the mix is homogeneous and apply immediately.

APPLICATION

Condur EGHS is handled like a thin mortar or conventional grout. It may be poured under base plates via a header box ensuring a continuous flow of material, or alternatively, pumped. The use of rods, chains or straps may assist.

Pour Thickness

Pours up to 40 mm. may be achieved using **Condur EGHS**, in applications with gaps less than 12 mm. the aggregate content may be reduced to allow for the narrow gap.

Minimum 10 mm and maximum 40 mm at a single layer.

IMPORTANT NOTES

In situations with deep sections > 40 mm. consult Cormix Technical Department.

Thickness should not exceed more than 40 mm. per layer. For long pours it is recommended to install expansion joints or divide the sections not exceeding 1.1 m. in length. This reduces the chance of cracks, due to exotherm of material & differences in linear thermal expansion & contraction between the grout & concrete.

CURING

The cure time of **Condur EGHS** will be dependent on the ambient and substrate temperatures. **Condur EGHS** will have fully hardened after 7 days at 23°C.

POT LIFE

The pot life will vary depending on the quantity mixed & the temperature. A full kit with normally have a pot life of at least 60 minutes when mixed at 30°C.

GROUT STORAGE

- All grout materials should be stored in a dry, shaded area in original unopened containers. Recommended storage temperatures are 16°-35°C.
- The materials have a shelf life in excess of 12 months.
- The grouting materials should be pre-conditioned to a minimum of 19°- 27°C for 24-48 hrs before mixing and application.
- Construct a shelter over the foundation to protect the work area from the elements particularly during cold, wet or very hot conditions.

CLEANING

Clean all tools and equipment immediately with **Cormix Cleaner**.

PACKAGING

A+B+C 10 & 25 kg. pre-measured sets or larger packaging upon request.

HEALTH & SAFETY

Avoid contact with skin and eyes and avoid breathing vapour. Use only in well ventilated areas away from heat sparks or naked flame. Wear suitable protective clothing, gloves and eye protection when mixing or using. If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, do **NOT** induce vomiting give a glass of water. If in eyes, hold eyes open, flush with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord.

CONTACT DETAILS

Cormix International Limited

Regional Office,
89 Romkloao Rd., Sansab, Minburi, Bangkok 10510
Tel. (66 2) 917 3955-8, 543 8890
Fax. (66 2) 917 3959, 543 8891
<http://www.cormix.com> E-mail : info@cormix.com



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