

# Condur® EGHES

## 3 COMPONENT HIGH STRENGTH, TEMPERATURE RESISTANT EPOXY GROUT

### DESCRIPTION

A solvent free 3 component high strength epoxy grout which when mixed produces a flowable material with excellent adhesion to concrete surfaces.

### USES & ADVANTAGES

**Condur EGHES** is a high early strength epoxy grout produced for speedy and permanent patching repairs of concrete surfaces including small honey combs, surface defects, blow holes and minor damage in roads, bridge decks, runways and precast units.

#### Advantages include:-

- High early strength.
- Fuel and chemical resistance.
- Fast setting.
- Shrinkage free hardening.
- Rapid hardening.
- High mechanical strength.
- Curing is not affected by high humidity.
- Abrasion & Impact resistant.
- Vibration resistant.
- Strong bond to metal & concrete.

### PROPERTIES

<b>Components:</b>	3 (Base, Hardener & Filler)
<b>Form:</b>	Pourable
<b>Appearance:</b>	Grey (when mixed)
<b>Mixed Density (kg/ltr):</b>	2.17 ± 0.05
<b>Working Time:</b>	20 - 30 mins. @25°C
<b>Compressive Strength:</b>	
ASTM C579, Method B	
3 hrs:	≥70 N/mm <sup>2</sup>
1 day:	≥75 N/mm <sup>2</sup>
7 days:	≥85 N/mm <sup>2</sup>
<b>Flexural Strength:</b>	7 days ≥20 N/mm <sup>2</sup>
ASTM C580	
<b>Bond Strength:</b>	7 days ≥ 2 N/mm <sup>2</sup>
ASTM D4541	(concrete failure)
<b>Condur EGHES (Base+Hardener)</b>	
<b>Tensile Strength:</b>	7 days ≥25 N/mm <sup>2</sup>
ASTM D638	
<b>Bond Strength:</b>	7 days ≥ 2 N/mm <sup>2</sup>
ASTM D4541	(concrete failure)
<b>Chemical resistance</b>	(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
<b>Application Temperature:</b>	5°C to 40°C
<b>Grouting Thickness</b>	Min : 10 mm. Max : 50 mm

#### Note:

- The above data is typical under laboratory conditions @25°C and does not constitute a specification. Field trials are recommended.
- The working time starts when the hardener is added to the resin material. Do not let the resin and hardener stand still without adding aggregates which may result in shorter working time.
- Working time will vary depending on the temperature and the quantity mixed. To get the optimum working time keep the material shaded and in a cool place.
- Strengths are typical of standard mix ratios.
- To obtain performance characteristics stated in this data sheet, the mixing ratio must be maintained.

### CHEMICAL RESISTANCE

**Condur EGHES** 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.

### MIX RATIO

Part A : Part B : Part C = 5 : 1 : 19 by weight.

### SUBSTRATE PREPARATION

Surface preparation is important. All surfaces should be dry, clean, free from standing water, grease, curing compounds, mould oils and all loosely adhering particles. Cement laitance should be removed by mechanical means. Roughen surfaces with chipping to ensure good bonding. Steel surfaces should be grit blasted to white metal. Concrete surfaces should be chipped so as to expose aggregates to ensure laitance and weak particles are removed.

### PRIMING

For maximum adhesion of heavily filled mortars etc. the surfaces to be treated should be primed by mixing A & B in the packed ratio. Apply with a stiff brush, work in well. For concrete surface with moisture content >4%, use **Condur EA1** as primer. Alternatively **Condur EA1** can also be used as primer for wet & damp conditions. Tack free time for **Condur EA1** is approx. 3-4 hours @25°C.

### MIXING

Mix component A and B thoroughly with a slow speed drill for 1-2 minutes. (Max 400 R.P.M.) Then add component C for the desired consistency and mix until a homogeneous mortar is achieved.

### APPLICATION

Whilst the primer is still tacky pour the material and trowel firmly into place. For large volumes apply in layers ensuring the previous layers have hardened and cooled. Contact Cormix International Ltd. for advise on difficult applications.

- If grouting in multiple layers, it is necessary to sprinkle a small amount of 2.5 mm aggregate over the first layer before the grout reaches its setting time. Before placement of 2<sup>nd</sup> layer brush out loose aggregates from the 1<sup>st</sup> pour. Another method is to scabble gently the top surface and make it rough when grout reaches near to its setting time.

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### FINISHING

A smooth finish may be achieved before the grout reaches its setting time by spraying or brushing the surface with xylene, white spirit or epoxy grade thinner and then by using the steel trowel or wooden trowel level the surface.

### CURING

- Cure time will depend on the ambient and substrate temperature. For the best results pour the grout and cure above 12°C
- The grouts setting time will be delayed and will not achieve the desired properties at temperatures below 5°C.
- For cold weather grouting please contact Cormix Technical Department for assistance.
- 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.

### IMPORTANT NOTES / SPECIFICATION CLAUSES

The minimum and maximum substrate application temperature should be 5°C and 40°C respectively. For additional information contact Cormix International Technical Service Department.

### PACKAGING

A+B+C = 25 kg. (Part A = 5 kg, Part B = 1 kg and Part C = 19 kg) premeasured sets or larger packaging is available upon request.

### STORAGE & SHELF LIFE

Store in dry conditions between 5-40°C. The shelf life is 12 months when stored correctly in unopened original containers.

### 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 : 2015 verified by TUV Nord.

### DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc. Cormix does not take responsibility nor need to defend others testing that does not achieve the published data. The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product. Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advise offered.

### CONTACT DETAILS

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