



## HIND ERS 21

### PRODUCT DATA SHEET

#### LOW VISCOSITY HIGH STRENGTH INJECTABLE GROUT

##### DESCRIPTION

**Hind ERS 21** is a two component solvent free low viscous fast curing epoxy resin system comprising of **Component A (Resin)** and **Component B (Hardener)**. It is designed especially for pressure injection into concrete for carrying structural repairs and base plate grouting. **Hind ERS 21** is supplied in pre-measured quantities, and conforms to **BS-6319**.

##### USES

**Hind ERS 21** is ready to use for pressure injection into concrete for structural repairs and filling up gaps in base plate in bridges, factory shed etc. The system possess the properties like low viscosity, non-shrink, free flowing and pourable, hence it find various usages in sealing of crack through injection operation, in expansion joint, floor joint, pavement joint and base plate grouting, etc.

##### ADVANTAGES

**Hind ERS 21** is very useful in concrete such as

- It can be injected into extremely fine cracks and small cavities.
- It has high compressive strength, tensile and flexural strength.
- Excellent bonding and adhesion.
- For filling up gaps of small height between Concrete & Base Plate.
- No shrinkage during curing.
- Like all epoxy resin system it has high chemical resistance.
- Cured material is not brittle and remains slightly flexible.
- Reduce thermal expansion co efficient thus improves thermal conductivity.

##### APPLICATION

**Surface Preparation:** Before application surface preparation is important, surface should be cleaned, dry, free from loose particles, oil, grease or other foreign materials, injection nipples are fixed in a square grid maximum 500 to 800 mm c/c depending on the cracks and nature of concrete, if required for effective treatment, the grid may be reduced. Before the injection starts all cracks and crevices are to be sealed with **Hind ERS 21** mortar and surface sealing is to be done for other porous areas.

##### Mixing:

Mix 1 part by wt of **Component B (Hardener)** with 2 parts by wt of **Component A (Resin)** i.e. **Mixing Ratio = Component A: Component B = 2:1 (by wt)**. Mix at least 5 minutes to uniform color without any streak using a drill and paddle mixed (speed 200 RPM) so as to avoid any entrapped air. Comp B is to be poured in Comp A and stirred gently.

**Injection:** The grout mixture should be pumped by a positive displacement plunger type pump. Inject at slow and even pressure through the injecting nipples till refusal or when the grout oozes out from nipple immediately adjacent to or above the one being injected.

##### Cleaning:

Clean all tools & equipment immediately after use with, Xylene, Toluene or suitable solvent.

## PROPERTIES

|                               |   |
|-------------------------------|---|
| Aspect                        | Light amber   |
| Mixed ratio                   | <b>(Resin) Comp A: (Hardener) Comp B = 2:1 (by wt)</b>                          |
| Density                       | 1070 to 1090 kg/ m <sup>3</sup>   |
| Pot life                      | 60 minutes at 27 °C   |
| Compressive strength at 27 °C | 35N/ mm <sup>2</sup> (min) in 24 hrs.<br>80 N/ mm <sup>2</sup> (min) in 7 days. |
| Tensile strength at 27 °C     | 15 – 20 N/ mm <sup>2</sup> in 7 days.   |
| Flexural strength 27 °C       | 30 – 40 N/ mm <sup>2</sup> in 7 days.   |
| Shrinkage                     | Practically no shrinkage.   |
| Chemical resistance           | Chemically resists by wide range of chemicals and oils.                         |

## PACKING

3, 6, 12 Kg Kit or as required.

## SHELF LIFE

Best before 12 months from the date of manufacture. Should be stored in a cool and dry place away from direct sunlight at temperature ranging between 2<sup>0</sup> C (Min.) and 35<sup>0</sup> C (Max.).

## HANDLING PRECAUTION

**Hind ERS 21** is non-toxic but ingestion is to be avoided. Any splashes to the skin must be washed with water. If contact with eyes occurs, wash well immediately with water and seek medical advice.

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### Note:

- **Hindcon Chemicals** maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The result shown here are generated from our laboratory or from our site experiences.
- Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since **HINDCON CHEMICALS LIMITED** has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
- The right to change the properties of the products is reserved with us. The proprietary rights of third parties must be observed. All orders are accepted subject to the terms of sale and delivery. Users must always refer to the most recent issue of the latest Data Sheet for the product concerned, copies of which will be supplied on request.

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(AN ISO 9001: 2015 COMPANY)

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