



## HIND ERA 31

### PRODUCT DATA SHEET

#### TWO COMPONENT THIXOTROPIC EPOXY RESIN BASED ADHESIVE

##### DESCRIPTION

**Hind ERA 31** is a solvent-free, thixotropic, two component adhesive and repair mortar based on a combination of epoxy resins and specially selected filler. Its pasty consistency, allows an easy and versatile application, manufactured as per **FIP Specification**.

##### USES

**Hind ERA 31** can be used suitably for:

- Structural thin film bonding of concrete, metal, wood, etc.
- Interior, vertical and overhead repair of concrete.
- Filling blowholes and sealing of concrete surface.
- Seal cracks around injecting ports prior to pressure injection grouting.
- Grout bolts, dowels, pins, vertical & overhead, etc.
- Segmental Bridge Construction.

##### ADVANTAGES

**Hind ERA 31** is very useful in concrete such as

- Paste consistency ideal for easy application on both vertical & overhead surfaces.
- Suitable for both dry and damp surfaces.
- Non-sag product even at high temperatures.
- Hardens without shrinkage.
- Excellent adhesion to concrete, masonry, metals and most structural materials.
- Fast setting and high early strength.
- High abrasion resistance.

##### COVERAGE

1.5 Kg. / m<sup>2</sup> to 1.8 Kg./ m<sup>2</sup> per mm thickness.

##### APPLICATION

**Surface Preparation:** All surfaces must be sound, clean, free from all loosely adhering particles. It may be damp or dry but free of standing water, cement laitance, grease, curing compound, foreign particles, etc. should be removed. Surface preparation work may be done by sand-blasting or other mechanical means.

**Mixing:** Mix both components together for at least two minutes with a mixing paddle attached to a slow speed electric drill [max 300 R.P. M.] until smooth consistency and even grey colour of the mixture is obtained. Mix only that quantity that can be used within its pot life. To prepare a mortar, slowly add upto one part by loose volume of oven-dried aggregate to one part of mixed **Hind ERA 31** until uniform consistency is obtained.

**Application:** When using as a structural adhesive, apply the mixed **Hind ERA 31** to the prepared mating surfaces with a trowel, spatula or by glove protected hand. When applying as a patching mortar, take into account any form of work that may be required. Place the prepared mortar in void and work with a trowel to fill the cavity. Strike off level. On damp surface ensure that the material is well rubbed in.

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

## IMPORTANT RECOMMENDATIONS

Optimal working temperature is 5° to 40° C. When working at a higher temperature, the pot life will be shortened. Similarly, when working at a lower temperature, the material will become more difficult to apply and it will take longer time to harden.

Minimum substrate temperature = 5° C.

Maximum thickness of adhesive = 3.5 mm.

Maximum thickness of layer for horizontal surface (mortar) = 30 mm.

Maximum non-sag thickness on vertical surface (mortar) = 10 mm.

Not to be used for sealing cracks under hydrostatic pressure. Epoxy mortar is for interior use only.

## PROPERTIES

Aspect	Paste
Colour	Grey (System), Comp 'A'-White, Comp 'B'-Black
Mix Ratio	2:1 (Comp A : Comp B)
Density	1.60 ± 0.10 kg/ lit (System)
Pot life at 30 °C	30 minutes
Compressive Strength at 30 °C	32-37N/mm <sup>2</sup> after 12 hours Curing
	55-60 N/mm <sup>2</sup> after 24 hours Curing
	75-80 N/mm <sup>2</sup> after 7days Curing
Bond Strength to Concrete at 30 °C	12-15 N / mm <sup>2</sup> after 7days (Concrete Failure 100%)
Tensile Strength at 30 °C	8-10 N/mm <sup>2</sup> after 7 days
	10-15 N/mm <sup>2</sup> after 14 days
Flexural Strength at 30 °C	10-15 N/m <sup>2</sup> after 24 hours of Curing
	20-25N /mm <sup>2</sup> after 7days of Curing
	25-30N /mm <sup>2</sup> after 14days of Curing

## PACKING

3 & 6 Kg Container.

## 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 ERA 31** 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.

### 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.

## HINDCON CHEMICALS LIMITED

(AN ISO 9001: 2015 COMPANY)

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