

HIND HYDRAFOAM PU (2K)

PRODUCT DATA SHEET

TWO COMPONENT WATER REACTIVE, HYDROPHOBIC POLYURETHANE RESIN FOR STOPPING WATER FLOW INTO CONCRETE WALLS, SLABS, LEAKY CRACKS, HONEY COMB & CONSTRUCTION JOINTS

DESCRIPTION

Hind Hydrafoam PU (2K) is a two-component solvent free polyurethane injection resin that cuts off water from cracks and reinforces the maintenance on concrete structures, subways and tunnels. It is a low expansion water stop reinforcing agent for which the water reaction expansion gets minimized. In comparison to other conventional water stopping polyurethane grout, it is stronger and its hardened foam is more rigid. It does not generate defects by foam generation and provides a permanent water stop effect.

USES

Hind Hydrafoam PU (2K) is used for defective concrete (cracked or honey combed), Tunnels, Dams, Subway (Metro Rail), sewerages and manholes.

FEATURES

- Due to Low Viscosity, it penetrates deep into the leakage section in fine cracks which provides a perfect water stopping performance.
- After it gets hardened, it provides higher and tensile strength than the mechanical strength of conventional concrete strength.
- Since its pot life is about 30-50 minutes, when the base agent & curing agent are mixed, it can be injected by the single component injection pump.

ADVANTAGES

- Repair Concrete cracks to stop water.
- Acts as a reinforcement for distressed concrete structures.
- Can be used for both dry and wet concrete cracks.
- Does not induce to develop new cracks.
- Inert after curing with no shrinkage.
- Deep penetration into fine fissures and cracks.

PROPERTIES

Parameters	Base Agent	Curing Agent
Aspect & Colour	Dark Brown Liquid	Colourless Transparent Liquid
Mixing Ratio (By weight)	100	100
Viscosity (mPa-s)	250	210
Specific Gravity (g/ml)	1.21	1.03
Pot Life at 25 ⁰ C	30 -60 minutes	
Curing Time at 25 ⁰ C	After 24 hours	
Compressive Strength 25 ⁰ C	55 N/mm ²	
Tensile Strength 25 ⁰ C	18 N/mm ²	
Tensile Shear Strength 25 ⁰ C	7.6 N/mm ²	
Expansion Ratio 25 ⁰ C	100% ~ 110 % (Ratio 1:1 :: Base Agent : Curing Agent) 200% (Ratio 10:1 :: Mixed Agent : Water)	

Method of Application

Base Agent & Curing Agent are supplied in premeasured ratio. **Curing Agent** is added to **Base Agent**. The **Curing Agent** is completely emptied into the **Base agent**. Both the Components are mixed with a mixer at **300 rpm (for example drilling machine with mixer)**. It is important that the mixture is also stirred thoroughly from the walls and the bottom. It is mixed until a homogenous mass is achieved; the two components are to be mixed quickly.

Cleaning Tools:

The tools have to be cleaned properly immediately after use. They are to be cleaned thoroughly with the cleaning agent After work has finished or in cases of longer interruptions the injection equipment is to be cleaned. Material must not dry out in the equipment and plug up vital machine components. The cleaning resp. solvent agent has to have a flash point exceeding +21°C.

CONSUMPTION

Generally, the mixed injection resin is injected via boreholes and packers into the cracks to be waterproofed, until the material comes out of the control holes.

Example:

- Existing cracks (crack width approx. 0.2 mm) have to be bored in a distance of approx. 20 to 30 cm.
- The boreholes have to be cleaned with oil free pressure air from the dust.
- Place the injection packers.
- If width is approx. 15cm, **consumption is approx. 300 g/m²**.

SHELF LIFE

Best before **12 months** in closed original packs and to be stored in a cool and dry place at temperature ranging between **10°C – 25°C**.

PACKING

Hind Hydrafoam PU (2K) is supplied in packs of **Base agent 20 Kg.** and **Curing Agent 20 Kg.**

HANDLING PRECAUTIONS

Hind Hydrafoam PU (2K) is non-toxic and non-flammable in nature. However, normal safety gadgets like goggles, gloves should be used while handling the material. Avoid breathing of vapors, when it contacts with skin, should be cleaned immediately. Seek medical advice in case of contact with eyes.

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.
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