

# EPOTAR 100H

## High Build Solvent Free Coal Tar Epoxy Coating

### Description:

EPOTAR 100H is a two parts, high performance, solvent free, coal tar modified epoxy coating designed to bond to most materials (concrete, steel, fiberglass, wood, etc.). It is formulated to be applied with high workability. Once cured it produces a high strength, tough, flexible thick coat membrane that is resistant to most chemicals and corrosive reagents. EPOTAR 100H has superior water resistance and highly flexible.

### Applications:

EPOTAR 100H used as a high build coating at:

- Marine structures and oil field facilities.
- Precast elements parried in underground to protect it from salt water and chemical ions attack.
- Anti-corrosive coating in industrial facilities.
- As a tank lining in crude oil and water ballast tanks, cofferdams etc.
- For concrete sewerage pipes, and manholes.
- Waste water facilities tanks.
- Broadcast coating for industrial traffic.
- Traffic wear-course in parking garages.
- Primer/sealer/topcoat for degreased concrete.
- Protective coating on permanently submerged surfaces such as ship hulls, sheet piling, concrete foundation sewerage pipes, off shore structures, foundation walls & sumps.
- Corrosion and abrasion resistance to concrete surfaces for many application including seawater tanks, manholes, lining, channels, sewage plants.

### Advantages:

- Excellent chemical resistance.
- In most applications does not need priming.
- Non-blushing & non-water spotting.
- Superior cycloaliphatic curing system.
- Excellent anticorrosive ability. High build. Can reach thick coat with one application.
- Heavy duty structural coating with high flexibility.
- Low viscosity, easily applied by roller, brush or spray.

- Exceptional resistance to impact, thermal shock & abrasion.

### Instructions for Use:

#### Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Ensure that concrete surfaces are fully cured.

For old concrete all contaminations should be removed. Use mechanical method like grinding, captive blasting and sand blasting for preparing the surface. If the substrate is restricted to access, utilize preparation by handy mechanical tools.

Perform repairs to cracks or damaged areas by using epoxy based repair products. Cracks should be reinforced with fiber mesh with one more extra coat on mesh area. Consults MATEX Technical Department for further advice.

For applications on metal surfaces, clean the surface by Sand blasting or mechanical wire brush to remove rust and corrosion. Apply EPOTAR 100H directly to metallic surfaces to prevent further oxidization of surface.

#### Mixing:

Mix the contents of component A (Base) with a low speed mixer for two minutes to homogenize the content of the container. Slowly add the contents of part B (Hardener) to Part A container and mix thoroughly the material with low speed mixer (200-300 RPM) for an interval of 3-4 minutes confirming a homogenous, color consistent, lump free mixture is reached.

#### Application:

After mixing, allow the product to rest for 3-5 minutes to release entrapped air. EPOTAR 100H can be applied by brush, roller or spray machine, after

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preparation of the work area, apply first coat with a thickness desired. The minimum thickness of product recommended is at 150 microns WFT (wet film thickness). Applied thickness can reach 250 microns WFT per coat. For airless spray application 10% of ARMOSOLVENT may be added. For brush or roller 5% volume of ARMOSOLVENT may be added if needed. Apply subsequent coats of EPOTAR 100H within a time frame of 24 hours. Minimum total recommended thickness is 500 micron for full system to achieve the desired properties. Allow 7 days for usage to ensure proper curing of the material.

## Standards:

EPOTAR 100H conforms to:

- ASTM D695, ASTM D638, ASTM D4060, ASTM D570, ASTM, D2240, ASTM D649

## Packaging:

EPOTAR 100H is available in 40 and 400 Kg. set of two equal parts metallic containers.

## Storage:

Store in original packing in dry conditions away from direct sunlight and in a temperature controlled warehouse.

## Coverage:

Approximately 10 m<sup>2</sup> / Lt. at 100 microns.

## Shelf Life:

EPOTAR 100H can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Cleaning:

Clean used tools with ARMOSOLVENT before product dries.

## TECHNICAL PROPERTIES

Color	: Black
Density	: 1.40 Kg. / Lt.
Tensile strength	: 35.0 N / mm <sup>2</sup>
Compressive Strength	: 70.0 N / mm <sup>2</sup>
Flexural Strength	: 36.0 N / mm <sup>2</sup>
Bond strength	: 2.0 N / mm <sup>2</sup>
Water Absorption	: <0.01%
Pot-life time at 25°C	: 50 minutes
Heat resistance	: -10°C to +90°C
Volume Solid	: 100%
Recommended Thickness Film (DFT)	: 200 – 400 microns
Touch dry	: 4 hours
Min. Recoating time	: 8 hours at 30°C
Cured	: 7 days at 30°C
Temp. of application	: from +5°C to +35°C
Water permeability (long term)	: nil @ 2 bar pressure over 3 months
Mixing Ratio (by weight)	: Base : 1 Hardener : 1

## Remarks:

- EPOTAR 100H should not be applied over existing coatings.
- For application in hot weather, it is strongly recommend to shade the working area and to keep the equipment used cool.
- Application should not be undertaken if the temperature is below 5°C, nor when the prevailing relative humidity exceeds 90%.
- The color of the coated surface will change to brown/red if cured in a high humidity environment.

## Health and Safety:

- Use goggles and gloves during application. Do not breathe vapor of products. Use only in well ventilated areas.
- Avoid contact with eyes or skin.
- Avoid direct contact with flames and fire.

MATEX Rev.00-1018

This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

