

Technical Data Sheet

EPOTAR 100

High Build Solvent Free Coal Tar Epoxy Coating

Description:

EPOTAR 100 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 high strength, tough, flexible thick coat membrane that is resistant to most chemicals and corrosive reagents. EPOTAR 100 has superior water resistance and is highly flexible.

Uses:

EPOTAR 100 used as a high build coating for:

- Marine structures and oil field facilities.
- Precast elements buried 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.
- 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.

For applications on metal surfaces, clean the surface by sand blasting or mechanical wire brush to remove rust and corrosion. Apply EPOTAR 100 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 the material thoroughly 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 1-2 minutes to release entrapped air. EPOTAR 100 can be applied by brush, roller or spray machine, after preparation of

EPOTAR 100

the work area, apply first coat with a thickness desired. The minimum thickness of product recommended is at 150 microns DFT (dry film thickness). Applied thickness can reach 250 microns DFT 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 100 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:

- ASTM D638, D4541, D570, ASTM C531

TECHNICAL PROPERTIES	
Color	Black
Density	1.40 ± 0.03 kg/lit
Volume Solid	100%
Application Temp.	from +5°C to +35°C
Pot-life time at 25°C	40 minutes
Recommended Thickness Film	300-500 microns (DFT)
Touch dry	4 hours
Min. Recoating time	8-12 hours at 30°C
Cured	7 days at 30°C
Bond strength (ASTM D4541)	2.0 N/mm ²
Water permeability (long term)	nil @ 2 bar pressure over 3 months
Service Temp.	-5°C to +90°C

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Coverage:

EPOTAR 100 covers approximately 4 m²/lit at 250 microns dft.

*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

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

Storage:

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

Shelf Life:

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

Cleaning:

Clean used tools with ARMOSOLVENT before product dries. Hardened materials can only be removed mechanically.

Remarks:

- EPOTAR 100 should not be applied over existing coatings.
- For application in hot weather, it is strongly recommended 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.

EPOTAR 100

Health and Safety:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapor or spray mist. The product is flammable, keep away from sources of ignition. DO NOT SMOKE. Take precautionary measures against static discharge.

FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to EPOTAR 100 Material Safety Data Sheet.

MATEX Rev.08--0822

MATEX warrants that its products are free from material and manufacturing defects. Instructions on how to use the product should be strictly followed to ensure effectivity and safe use. MATEX shall not be liable either directly or indirectly for any damages to personal, equipment or products that may occur as a consequence of the failure of any products application because it has no direct or continuous control over where or how its products are applied. It is the user's responsibility to acquire always the updated version of datasheets.

