# Dr. Fixit Coal Tar Epoxy



# TWO-COMPONENT COAL TAR EPOXY COATING FOR CONCRETE AND STEEL SURFACES

# Description

**Dr. Fixit Coal Tar Epoxy** is two-part coal tar epoxy based coating, composed of best quality dehydrated coal tar, liquid epoxy resins and curing agent, properly selected & graded inert fillers, additives and solvent. It is used as an anticorrosive & protective coating for concrete as well as steel structure because it has excellent chemical resistance properties in atmosphere or in contact with chemical solutions such as effluents, sewage, salty water and organic / inorganic acids & alkalis. It is most suitable for structures in submerged conditions. Complies to ASTM : D 522 - 93, ASTM : D 7027 - 05, ASTM : B 117 & ASTM : 870-09, IS : 101.

# **Typical Application**

#### Corrosion resistant coating for concrete and metal structures such as

- Sewage & Effluent treatment plants
- Thermal Power plants Water intake & outlet channels, ash ponds, coal handling units etc.
- Splash zones in dock and harbors
- Cross country underground pipelines
- Molasses tanks in sugar industry
- Storage tanks in fertilizer, petrochemical industry, refineries etc.
- Cooling towers
- Foundation protection from contaminated soil, backfill and water
- Sluice gates
- Industrial flooring in chloro alkali plants

#### Features

- Consistency low viscosity formulation helps for application by brush or spray.
- Adhesion excellent adhesion to concrete, asbestos & metallic surfaces.
- Durability Gives long lasting corrosion protection.
- Abrasion Resistance to abrasion makes it suitable for application over floors of tanks & concrete rafts before filling the soil.
- Chemical resistance Resistant to wide range of acids, alkali & salt solutions, effluents & sewage.
- Primer Self priming ability, makes it economical.

#### Packing

5 kg [Part-A Base 1.25 kg & Part B Hardener 3.75 kg]

#### Method of Application

#### 1 SURFACE PREPARATION

- Surface must be clean and free from dirt, rust, grease, oil, and loose particles.
- Thoroughly clean the concrete surface by harsh wire brushing. Clean the dust by compressed air. If possible, wash the surface with water to remove accumulated dust & dirt to achieve good bonding,
- Clean the steel surface to remove rust scales, by wire brushing & scrapping. The best method to clean the surface is sand / grit blasting for best performance.
- Rust removers & converter may be used to prepare the steel surfaces.
- For new surfaces to clean oil & grease use degreasing solvents, such as turpentine or thinners.
- Surface must be dry before application

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#### 2 MIXING

- Mix both part A & part B components in their individual containers thoroughly.
- Transfer the base component [part- A] to hardener component [part B] container completely.
- Mix the material manually using wooden batten or steel spatula thoroughly for 3 5 min. to achieve uniform mix.
- Material can be mixed by using drill machine attached with paddle stirrer at 250 300 rpm for 3-5 minutes
- Allow mixed material to stand for another 15 minutes for maturation and viscosity buildup

#### 3 APPLICATION

- Apply the mixed material by brush or spray over the prepared surface at the recommended coverage rates
- Allow first coat to dry for 8-10 hrs, depending upon temperature & humidity
- Apply second coat, in direction perpendicular to previous coat
- Allow the coating to cure for 7 days.

# **Technical Information**

PROPERTIES	SPECIFICATION	RESULTS
Appearance Part - A (Base) Part - B (Hardener)		Free flowing clear liquid Free flowing viscous liquid
Colour - Part - A (Base) Part - B (Hardener)		Water white to pale yellow Black
Mixing ratio, parts by weight		1:3 [part-A : part-B]
Specific Gravity		1.24 - 1.26
Viscosity @ 30°C, Ps		2 - 3
Pot life @ 30°C, Hrs		4 - 5
Tack free time @ 30°C, hrs		3 - 4
Recoatable time @ 30°C, Hrs		8 - 10
Full curing time @ 30°C, days		7
Dry Film Thickness, Microns for 2 coats		150 - 200
Flexibility, Mandrel test	ASTM : D 522 - 93	No cracking of film & adhesion loss
Bonding / adhesion, N/MM <sup>2</sup>	ASTM : D 4541	1.2 - 1.4
Scratch resistance, for 7 kg load	ASTM : D 7027 - 05	Passes
Water resistance, immersion - 7 days	ASTM : D 870 - 09	Passes
Chemical resistance, immersion in dilute acid alkali & salt solutions - 7 days	ASTM: C 868	Passes
Resistance to micro organisms	ASTM : G 21	No growth observed
Salt Spray resistance	ASTM : B 117	Passes

# **Precautions & Limitations**

- Apply the material as supplied, do not dilute with thinners.
- Apply the material as per the given coverage rates to achieve the desire dry film thickness
- Provide proper ventilation, during application in tanks or close areas
- Do not use for potable water tanks

Will discolour or turn brownish, loose gloss, shin etc. on exposure and contact with water. This does not alter any properties or quality of product.

# Coverage\*

- 2.5 3.25 m<sup>2</sup>/ kg for 2 coats @ 150 200 micron DFT
- \*Coverage depends on the nature and texture of the substrate and may vary accordingly.

\*For achieving the higher DFT of the product the coverage per sq. mt. will vary accordingly

# Shelf Life

- Shelf life is 18 months from date of manufacturing in unopened containers.
- Store at cool & dry place, away from sun heat & fire.

# Health & Safety Precautions

- Use rubber hand gloves & safety goggles, while using Dr. Fixit Coal Tar Epoxy.
- In case of contact with skin, wash with plenty of water.
- Keep out of reach of children's.
- Do not smoke during application.
- Do not inhale.

# Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals





Pidilite Industries Limited Construction Chemicals Division Ramkrishna Mandir Road, Post Box No. 17411 Andheri (E) Mumbai 400059 INDIA Tel +91-22-2835 7000 • Fax +91-22-2835 7008 www.drfixit.co.in • info@drfixit.co.in

Dr. Fixit Advice Centre (Toll Free No.) 1800 209 5504

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