



TEK E-COAT 45

Two Parts Epoxy based Protective Coating for Steel Surfaces

Product Description

- E-COAT 45, top coat and intermediate are two component epoxy based protective coatings for steel surfaces in industrial and marine areas.
- E-COAT 45 is suitable for exposure in environmental zones: frequently wet by fresh water or salt water, weak acids and alkalis.

Uses

- Steel surfaces of bridges
- Refineries, petrochemicals and power plants
- Marine areas
- All the surfaces which have frequent contact with water (except potable water), weak acids and alkalis and some natural chemicals.

Advantages

- Pre-weight components
- Good abrasion and chemical resistance
- Long pot life
- High adhesion to prepared steel surfaces
- Anti corrosion properties

Chemical Resistance

A small piece of absorbent cotton is placed on the test panel which is coated with 2 layers of FARCOTOP E-COAT45 with 110µm DFT and cured for 14 days. The cotton is saturated with the solution and left on the coating for 24 hours and after that the surface is washed then evaluated.

Chemical	Concentration	Result
Sodium Hydroxide	5%	No effect
Sulfuric Acid	5%	Stain
Phosphoric Acid	5%	No effect
Ammonium hydroxide	5%	No effect
Acetic Acid	5%	Slight blister
Hydrochloric Acid	5%	Slight Stain

Technical Data

Topcoat Color	Grey
Intermediate color	Red
Non Volatile, %by weight ASTM D 2369	Intermediate: 65±2%
	Top coat: 60±2%
Specific Gravity (A+B) ASTM D 1475	Intermediate: 1.33±0.03
	Top coat: 1.25±0.03
Mixing Ratio (by weight)	A:B 3:1
Recommended layers	2 layers(top+intermediate)
Thickness(DFT)	Intermediate: 60-75µm
	Top: 50-65µm
Total thickness(DFT)	(top+intermediate)110-140µm
Pot life at 25°C	8hours
Tack free at 25°C	at 50-65µm DFT Maximum 2 hours
Dry Hard at 25°C	at 50-65µm DFT Maximum 5 hours
Complete curing at 25°C	at 50-65µm DFT 7days
Tensile adhesion ASTM D 4541	>25 kg/cm ²
Salt spray ASTM B 117 110 µm (DFT)	1000 hours no blistering ; No under film corrosion

Method of Use

Surface Preparation

The steel surface must be clean, dry and free from all contamination (e.g. oil, grease, fats, chemicals, rust and paint). Clean the surface by wire brushing or sand blasting. It is recommended to use one of the following methods for surface preparation: SSPC-SP6 NACE 3, ISO 8501-1, BS 7079: A1

Mixing

- The component A (Base) should be stirred and whilst continuing stirring component B (Activator) should be slowly added. Continue stirring until a homogenous mix is obtained.

FARCO TEK E-COAT 45

- Mix only enough to be used within the recommended pot life. Materials nearing the end of their pot life MUST NOT be mixed with freshly mixed coating.

- Improper mixing or disregard to the mixing ratio, result in ineffective curing or low quality coating.

Application

- E-COAT 45 can be applied by brush or roller.

- Apply the second coat Min: 4hours and Max: 72 hours at 25 °c. If the ambient temperature or surface temperature is higher, reduce the Max recoating time to 24 hours or less.

- If the Max recoating time is passed, roughen the previous surface for improving the adhesion between layers.

- Do not apply when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.

- Minimum temperature for application is 10°C and maximum 45 °c.

- Use ventilation in confined areas, when mixing or applying.

- In case of thick application or weak ventilation or applying in cold weather, the solvent is not able to evaporate properly and entrapped, therefore blistering and weak adhesion between the layers may occur.

- To improve the corrosion resistance properties of E-COAT45, it is recommended to apply E-Coat 40(epoxy primer) or in ex-

treme situation apply FARCOTEK ZR (zinc rich epoxy).

Cleaning

Uncured material may be cleaned from application tools, etc. by using thinner. Cured material can only be removed mechanically.

Coverage

9.5-10.5 m²/L for each layer according to the recommended thickness.

Packaging

FACOTEK E-COAT 45 is supplied in:

A: 3kg, B: 1 kg for both top and intermediate.

Shelf life and Storage

E-COAT 45 paints have a shelf life of 12 months if kept in a dry store between 5°C and 30°C in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

Safety and Handling Precaution

Avoid contact with the skin, eyes and avoid breathing its vapor. Wear protective gloves.

Technical Service

The SHIMISAKHTEMAN Technical Service Department is available to assist you in the correct use of our products in the field



242 Bldg., Mirdamad Blvd., After Naft St., Tehran. Iran

Tel: +98 21 (22263100 , 22263099 , 22259736) Fax:+98 21 22260586



+98 21 27427