

CHEMCOAT EP-TR

NON-TOXIC, EPOXY RESIN, PROTECTIVE COATING FOR METAL & CONCRETE SURFACE

DESCRIPTION:

CHEMCOAT EP-TR high gloss, non-toxic, coating is based on solvent free, epoxy resins which contain pigments and fine fillers. It is supplied as a two pack material, in pre-weighed quantities ready for on-site.

SPECIFICATION:

The non-toxic, epoxy resin coating shall be **CHEMCOAT EP-TR** a 100% solids, solvent free, protective coating. The coating shall be moisture tolerant and, when cured, shall be suitable for use in contact with potable water. It shall further possess excellent bond and chemical resistance properties.

RECOMMENDED USES:

Provides a non-toxic coating to concrete and metal surfaces, which is both chemical and corrosion resistant. It is suitable for applications such as:

- Pipes and tanks
- Chemical plants
- Reservoirs and water treatment works
- Warehouses
- Laboratories
- Pharmaceutical manufacturing plants
- Service stations
- Grain silos and dairies
- Meat and food processing plants

ADVANTAGES:

- Multi-purpose coating, due to non-toxicity
- Low cost service life - resistant to mould growth, chemical attack and abrasion
- Easy to clean, smooth gloss finish, with high build capability
- Easy to apply, solvent free, formulation makes it suitable for use in confined spaces

INSTRUCTIONS FOR USE:

Concrete surfaces

All surfaces must be smooth, sound and free from debris, loose or flaking material and areas of standing water. Surfaces must be free from contamination such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitance free and free from any traces of shutter release oils and curing compounds.

Steel surfaces

All surfaces should be grit blasted to meet the requirements of BS 4232, First Quality. The lining work should be programmed so that newly cleaned steel is coated as soon as possible before the formation of rust or scale.

Mixing

The contents of the base can should be stirred thoroughly to disperse any settlement. The entire contents of the hardener can should be added to the base container and mixed thoroughly until a uniform consistency is obtained, taking particular care to scrape the sides and bottom of the container. It is recommended that mechanical mixing be employed, using a mixing paddle on a heavy duty, slow speed electric drill.

Placement

Use a pump-up or airless spray for best results. A short nap roller or lamb's wool applicator may also be used.

Clean-up

Clean tools and equipment with solvent such as CHEM SOLVENT, xylene, xylol, toluene or MEK. Do not allow the epoxy to harden on equipment.

PROPERTIES:

Solids by weight @ 25°C : 100 % (mixed)

Pot life @ 25°C : 1 Hour 25 minutes

@ 35°C : 55 minutes

Drying time : @20°C @35°C

Touch dry : 6 hrs 3 hrs

Re-coatable : 6-18 hrs 3-12 hrs

Fully cured : 7 days 5 days

Bond strength : Substrate failure first

(ASTM 4541-85) : at 2 N/mm²

Water Absorption (weight) : < 0.1%

Chemical resistance

(test results with some common chemicals)

Acids (m/v)

Phosphoric acid 10% : Very good

Lactic acid 1% : Very good

Hydrochloric acid 30% : Good

Alkalis (m/v)

Sodium Hydroxide 40% : Excellent

Solvents & organics

Kerosene : Excellent

Petrol : Very good

Gas oil : Very good

Nickel plating solution : Very good

Aqueous solutions

Distilled water : Excellent

Chlorinated water : Excellent

Marsh water : Excellent

Sewage water : Excellent

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PACKING:

4 L (Part A + Part B) Two component units.

COVERAGE:

Coverage Rates 2.5 m²/liter

Badly porous surface may reduce coverage

SHELF LIFE:

One year in unopened container.

PRECAUTIONS:

- Epoxy components may cause irritation, avoid contact with skin and eyes.
- Always wear protective clothing (rubber gloves, eye protection, etc.) when using the product.
- Solvents are Flammable. Keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion-proof application equipment.

HEALTH AND SAFETY:

CHEMCOAT EP-TR should not come in contact with the skin and eyes, or be swallowed. When using **CHEMCOAT EP-TR** ensure adequate ventilation and avoid inhalation of vapour. Some people are sensitive to resins, hardeners and solvent.

Wear suitable protective clothing, gloves and eye protection. The use of barrier creams provides additional skin protection. In case of contact with the skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately – do not induce vomiting.