

# MonniChem ET100

High Build Solvent Free Coal Tar Epoxy Coating

Formerly" Epossitar 100"

## Product Description

MonniChem ET100 is a two-component solvent free epoxy polyamide coating, modified with low temperature tar. It is specially formulated for high build applications. Once cured, it produces a tough, flexible, chemical and impact resistant film.

MonniChem ET100 is formulated to be easily applied, as thick as 200 microns in one coat. It provides very good resistance to aggressive chemicals, water, acids, and alkalis.

## Uses

MonniChem ET100 is used as follows:

- ▶ As an anti-corrosive coating, suitable for industrial atmosphere, immersion in salty and alkaline solutions, crude oil, for concrete sewerage pipes, and manholes
- ▶ As a tank lining in crude oil and water ballast tanks, coffer dams etc.
- ▶ To provide chemical corrosion and abrasion resistance to concrete surfaces for many application including seawater tanks, manholes, lining, channels, sewage plants, etc.

## Advantages

- ▶ Self-priming
- ▶ Excellent anticorrosive ability
- ▶ 100% solid content
- ▶ High build
- ▶ Low temperature curing
- ▶ Heavy duty structural coating
- ▶ Easily applied by roller, brush or spray
- ▶ Exceptional resistance to impact, thermal shock & abrasion

## Usage Instructions

### Surface Preparation

All surfaces must be dry, smooth, clean, and free from dust or loose material. Concrete surfaces must be fully cured and laitance must be removed by any suitable method.

For old concrete, all contamination must be removed and a sound clean substrate should be exposed. Mechanical means of preparation are preferred followed by the removal of dust and other loose debris using an industrial vacuum.

Cracks should be reinforced with fibre mesh and must then be treated with epoxy mortar. Contact Monneli Technical Department for recommended products.

### Mixing

Prior to application, stir component A (resin), then add component B (hardener) to it and mix thoroughly with a low speed electric drill (200 – 300 rpm) fitted with a suitable paddle to obtain a homogenous mixture.

### Application

After mixing the two components, product will be ready for brush or airless spray application 5-10% Monneli Solvent 10 may be added for airless spray application. Use nozzles of 0.21" – 0.025", and working pressure 140 – 160 bar. For brush or roller add 5% volume of Monneli Solvent 10 if needed.

MonniChem ET100 is generally applied as two coats application with a wet thickness of 200-300 micron per coat.

The hardening time vary sensitively according to environmental conditions and the type of support.

### Cleaning

Tools and equipment should be cleaned with Monneli Solvent 10 immediately after use. Hardened material should be removed mechanically. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

### Recommendations

- ▶ MonniChem ET100 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 colour of the coated surface will change to dark brown if cured in a high humidity environment.

### Technical Data

Category	Typical Values
Color	Black
Mix Density at 25°C	1.35 kg/L
Solid Content	97%
Pot life at 25°C	>1 hour
Recommended film thickness (DFT)	200 – 400 microns
Compressive Strength (ASTM C 579)	>40 N/mm <sup>2</sup>
Elongation (ASTM D638-10)	30%
Tensile Strength (ASTM D638-10)	>5 N/mm <sup>2</sup>
Water permeability (24 hrs) At 5 bars pressure (BSEN 12390)	NIL
Abrasion Resistance (ASTM C501-84)	0.24gm/1000 cycles
Thermal Coefficient of Expansion (ASTM C531)	7.3 x 10 <sup>-5</sup> °C <sup>-1</sup>
Drying & recoating times at 100 mic. (25°C, 65%) RH	from +5°C to +35°C
Touch dry	
Pull-Out Strength (ASTM D4541-09)	>2.0 N / mm <sup>2</sup>
Water absorption (ASTM D 570-98)	< 0.01%
Mixing Ratio (by weight)	
Base	1
Hardener	1
Minimum recoating time at 25°C	8 hours
Cured at 25°C	6 days
Temperature of application	from +5°C to +35°C
Service Temperature	-5°C to +80°C

All values are subject to 5-10 % tolerance

## Consumption

Approximately 5m<sup>2</sup>/Liter at 200 microns

## Packaging

MonniChem ET100 is supplied as 20 Liter Kit and 400 kg Kit.

## Shelf Life & Storage

Store generally in dry covered place with a temperature between +5°C - +35°C and RH below 70%. The expected shelf life of the product is 12 months from production date.

## Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment. Avoid contact with skin, eyes and inhalation of vapour. Ensure proper ventilation at working place.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water.

In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly. If ingested, obtain medical attention immediately. Do not induce vomiting.

## Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

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