

# MonniChem EPS

## Epoxy Polysulphide Elastomeric Coating

### Product Description

MonniChem EPS is a two component Polysulphide modified epoxy protective coating for concrete and steel surfaces. It is specifically developed as lining and waterproofing coating for potable water retaining structures. Its flexibility and ease of application also make it ideal for use as crack sealing coating.

### Uses

- ▶ Internal Protective lining for potable water, concrete or steel tanks
- ▶ Hard wearing and chemically resistant floor coating in industrial areas
- ▶ Covered parking decks
- ▶ Heavy duty protective coating for concrete and steel in oil refineries, paper mills, garages, hospitals, hangers, man holes, sewage water tanks and most liquid containment areas

### Advantages

- ▶ Non Toxic - solvent free
- ▶ Safe for use with potable water
- ▶ Flexible with crack bridging ability
- ▶ Excellent abrasion resistance
- ▶ High bond strength to a variety of substrates
- ▶ Superior chemical resistance
- ▶ Good weather resistance
- ▶ Easily applied by brush or roller

### Usage Instructions

#### Surface Preparation

The surface should be sound, clean, dry and free from loose and flaking materials, efflorescence, laitance, curing compounds, dirt, oil, grease or other contaminants. Wet substrates should be sponge dried to remove all free surface water, then air dried. Treat oil or grease contamination with degreaser followed by water or steam cleaning. Mechanical methods like grinding or grit/captive blasting in order to provide a suitable profiled open textured surface is strongly recommended.

New concrete or cementitious surfaces should be at least 28 days old and have moisture content not exceeding 5%. Old or existing floor should be refurbished mechanically to ensure clear sound substrate.

Surface irregularities and blow holes shall be repaired with MonniFinish. Cracks, expansion joint and control joints should be properly addressed, prior to application. After all preparation is complete, ensure dust is removed from the surface using an industrial vacuum.

Steel Surfaces should be grit blasted to surface quality SA 21/2. Coat the surface before it starts to re-oxidize.

#### Priming

The clean and dry surface to be treated with MonniChem EPS should be primed using MonniPrime EF, a two component solvent free epoxy primer. Add the entire content of the Hardener (Component B) to the Base (Component A) and mix thoroughly for at least 2 minutes using a drill and spiral mixing head. Apply the mixed material immediately to the substrate, using a medium or short hair roller. The primer should be well scrubbed into the substrate to ensure full coverage. For details, refer to the Technical Data Sheet of MonniPrime PU. Allow the primer to be tack free before over coating with MonniChem EPS.

## Mixing

MonniChem EPS is supplied in two preweighed components. Thoroughly stir the contents of the base can. Pour the hardener (component B into the base (Component A pail and mix well with a mechanical jiffy-type mixer operated at low speed. Scrape the side of the pail to ensure the entire product has been properly mixed.

## Application

After mixing MonniChem EPS should be immediately applied by short handed brush or good quality rollers or by airless spray, to the surface ensuring a continuous coating of uniform thickness. The second coat can be applied as soon as the first coat has dried (within 8-10 hours, depending on the ambient and surface temperatures.

MonniChem EPS must be applied at a minimum total dry film thickness of 500 microns. For potable water application, wait for 14 days after application prior to use.

The coating can be applied as a flexible crack bridging wear coat with an anti-slip finish for the parking deck system.

Graded sand/quartz can be broadcasted on the first coat while it is still wet and allowed to dry completely. After overnight drying, the excess sand/quartz can be brushed away and the second coat be applied

## Cleaning

All tools used in the preparation and application of MonniChem EPS must be cleaned with SOLVENTE 10 before hardening.

## Consumption

5 m<sup>2</sup> / Liter for 200 microns d.f.t

## Packaging

MonniChem EPS is supplied in 4 Liter and 15 Liter kits (Base & Hardener.

## Shelf Life & Storage

Keep the product in tightly closed containers stored in dry covered place, at a temperature not less than 5°C and not more than +35°C. Under these conditions, the product will have a shelf life of 12 months.

## Technical Data

| Category                             | Typical Values  |
|--------------------------------------|---|
| Appearance                           | Liquid coating  |
| Color                                | Gray, white & blue  |
| Mix density at 25°C                  | 1.46 kg/L   |
| Pot life at 25°C                     | 50 minutes  |
| Elongation at 7 days (ASTM D 412)    | 65%   |
| Tensile Strength 7 days (ASTM D 412) | 13 N / mm <sup>2</sup>  |
| Shore D Hardness                     | 40  |
| Adhesion to concrete                 | Concrete Failure  |
| Tack free time                       | 6-8 hours   |
| Full Cure                            | 7 days  |
| Application Temperature              | +5°C to 35 °C   |
| Service Temperature                  | -5°C to +80°C   |
| Chemical Resistance                  | Resistant to dilute acids, alkalis, solvents, oils, petrol, effluents, sea water. |

All values are subject to 5-10 % tolerance

## Applicable Standards

- ▶ BS 6920

## 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.