

# MonniChem K40

Water Based Epoxy Coating for Non-Toxic Applications

## Product Description

MonniChem K40 is a two component water based epoxy resin coating. It has good characteristics of adhesion to concrete, iron, ceramics, etc. After curing the product transforms into an absolutely non toxic, continuous coating, waterproofing and with good resistance against chemical solutions.

MonniChem K40 gives good general protection for concrete surfaces and provides an easily cleaned, non dusting finish in numerous industrial and commercial applications. The system is free of organic solvents and can be applied to damp surfaces.

## Uses

MonniChem K40 is used for impermeable coating in a wide range of applications such as:

- ▶ Swimming pools
- ▶ Wall coating in food industries (winery, packing house, etc.)
- ▶ Laboratories
- ▶ Operating rooms
- ▶ Canteens and kitchens
- ▶ Warehouses
- ▶ Places where a protective non-toxic continuous covering is required.
- ▶ Hard wearing floor coating in industrial areas

MonniChem K40 is ideal for waterproofing and protection of concrete or metal tanks containing drinking water, certain chemical solutions, oils and fuel.

## Advantages

- ▶ Durable and good resistance to abrasion
- ▶ Very good adhesion to the support surfaces
- ▶ Non-toxic
- ▶ Supplied in pre weighted packs, ready to mix at site
- ▶ Safe to use as it is water based
- ▶ Easy to use, and good resistant against chemicals
- ▶ Ideal for maintenance application
- ▶ Approved for use with potable water

## Usage Instructions

### Surface Preparation

The surface must be perfectly clean, solid, sound, uncontaminated, free from oil, grease, old friable varnish, etc.

New concrete should be at least 28 days old unless water reducing admixtures have been incorporated.

Old concrete should be sound, clean to achieve maximum adhesion. Dust should be removed by vacuum brush. Oil and grease should be removed by chemical etching treatment followed by water cleaning. It is recommended to shot blast the concrete substrate in order to provide a suitable clean surface. All necessary repairs should be made prior to application by using Monneli concrete repair products.

Metal surface should be completely cleaned by blasting or grinding to remove all rust and corrosion. It is strongly recommended to clean the surface with solvent or a strong detergent to ensure surface is free from grease or oil.

### Priming

Concrete surface must be treated with MonniPrime E or MonniPrime WB. Concrete corners between wall-wall and floor-wall must be rounded with MonniRep HR. For ceramic or steel supports use MonniMax EP for rounding the corners.

### Mixing

For the preparation of MonniChem K40 pour component B (hardener) into component A (resin) and mix carefully with a drill at low number of turns (200–300rpm), till obtaining a homogeneous consistency.

### Application

Apply the coating with a brush, roller or airless spray in at least two coats in a rate of 0.3-0.4 Kg/m<sup>2</sup> per coat. Before applying the second coat make sure that the first one has completely hardened. If the second coat is delayed more than 20 hours, then the previous coat must be thoroughly abraded to give an adequate mechanical key and solvent wiped.

Fix fibre mesh to reinforce corners and cracks between the two layers of MonniChem K40.

### Cleaning

Tools and equipment should be cleaned with water 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

- ▶ Partial mixing of the product components should not be allowed under any conditions
- ▶ Extra care should be taken when applying at high temperature as pot life of the mixed product will shorten automatically
- ▶ It is recommended to shade the working area while mixing and placing MonniChem K40
- ▶ MonniChem K40 should not be applied onto surfaces with relative humidity more than 80%, and temperature below +5°C.

### Consumption

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

### Packaging

MonniChem K40 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                      | Colmef Color Chart                         |
| Density at 25°C            | 1.28 kg/L                                  |
| Pot life at 25°C           | about 40 minutes                           |
| Bond Strength (ASTM D4541) | > 2.00 N/mm <sup>2</sup>                   |
| Tack free time at 25°C     | 2-3 hours                                  |
| Full cure at 25°C          | 7 days                                     |
| Time Between Coats         | 24 hours                                   |
| Dry film thickness         | 200 microns per coat                       |
| Temperature of application | +5°C to +35°C                              |
| Chemical Resistance        | Mild acids, alkalis, solvents and seawater |

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.

### Legal disclaimer

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