

## T-POX 3400 CR

TWO COMPONENT, SOLVENT FREE - CHEMICAL RESISTANT EPOXY COATING

### Description of Product

T-POX 3400 CR, chemical resistant, solvent-free, two-component epoxy resin based , coating.

### Features:

Good adhesion to all kinds of metal and concrete surfaces, high resistance to friction, has a high chemical and mechanical resistance and forms a hard film. The film surface is bright and slippery. Easy to clean, does not contain bacteria, does not dust, does not harm health. It is resistant to dilute acids, dilute and concentrated alkalis, cleaning detergents and disinfectants, vegetable, mineral and animal oils, sea water, diesel oil, gasoline, alcohol and many other solvents.

### Fields of Application

especially in waste water plants,  
coating applied to cement based surfaces  
It is material.

- treatment plants,
- waste water pipes,
- biogas plants,
- Oil plants (inside and outside)
- Corrosion protection in iron-steel structures use as overlay

### Advantages

- Solvent free.
- It is very hard after drying, getting damaged and scratch resistant.
- Tiksotropi is.
- Against weather conditions, water, waste water, sea water, It is resistant.
- High abrasion resistance.
- Diluted acids, cleaning products, diluted resistant to salts and mineral oils.
- Resistant to water, waste water and sea water.
- Diluted alkalis, aliphatic hydrocarbons, oil, against petroleum products such as gasoline and diesel It is resistant.

### Appearance

Mix (Part A +Part B): Ral colors

\*Differences in color may occur under the influence of direct sunlight. This does not affect the physical and chemical resistance of the coatings.

### Packaging

Part A: / Part B =7/1

Total: Part A+B: 25 kg. net – Part A+B: 27,50 kg. gross

\*Barrels are available if requested.

### Storage

Store in original sealed containers in a cool dry environment at temperatures between +5°C. Do not put excessive loads on top of the products, which would damage the packaging.

### Shelf Life

Minimum 12 months from date of production if stored in original unopened containers. Once opened, product should be consumed within one week as it is stored under appropriate storage conditions.

**Chemical Structure**

Part A: Epoxy Resin Part B: Epoxy Hardener

**Technical Specifications**

All technical values were calculated based on +23°C and 50% relative humidity. Temperature and humidity changes would change technical values.

**T-POX 3400 CR Technical Data**

Density	Mixed Resin: 1.40-1.50 kg/liter (± %3)
Viscosity	Mixed Resin: 100-300 mPa.s
Shore D Hardness	7 days: 84 (ASTM D2240-05)
Compressive Strength	28 days: > 50 N/mm <sup>2</sup> (ASTM D695-10)
Flexural Strength	7 days: > 30 N/mm <sup>2</sup> (ASTM D695-10)
Bond Strength	7 days : > 3 N/mm <sup>2</sup> (Concrete) (ASTM D7234)
Abrasion Strength	7 days : 65 mg (± %3) (CS 10/1000/1000) (ASTM D4060 – 14)
Pot life	40-50 munite
Powder Dryness	2-4 hour / 23°C
Touch Dryness	5-7 hour / 23°C
Between coat time	18-24 hour /23°C
Acceptence Dryness	24 hour /23°C
Total Curing Time	7 days
Aplication Format	Roll,Bruch

**Preparation of Substrate**

Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 2,5 N/mm<sup>2</sup>. The residual moisture content of the substrate must not exceed 4%, the substrate temperature should remain a minimum of +8°C and the temperature of the substrate must be at least +3°C above the current dew point temperature.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Oil-contaminated substrates must first be pre-cleaned with an emulsifying cleaning detergent in accordance with the supplier's instructions. Finally, the concrete or cement screed surface is cleaned using high-pressure water jetting. Excess water is removed from the surface by wet and dry vacuum cleaner.

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve a profiled open textured surface.

The surface should be vacuumed by industrial vacuum cleaners to remove dust. If in doubt of the surface, apply a test area first. Should not be applied to wet or frozen surfaces and surfaces with high humidity.

Before applying T-POX 3400 CR, the substrates should be primed with appropriate Momentum materials.

**Application Conditions**

During the application, ambient temperature should be between +10°C and +30°C. Relative Air Humidity should not exceed 80% and the substrate temperature should be between +10°C and +40°C. Substrate humidity should be maximum 4%.

Substrate temperature shouldn't be less than +8°C and must be at least +3°C above the current dew point temperature.

**Mixing**

Make sure that the product temperatures are between +10°C and +30°C before starting the mixing procedure. Components A (resin) and B (hardener) are packaged in the prescribed mixing ratios. The B-component will be added to the A-component. Care must be taken that the hardener is completely discharged from the container. Mixing is performed at 300 rpm. speed with a stirrer. Mix evenly at the sides and bottom of the container so that the hardener is evenly distributed. This process is carried out for 5 minutes until a homogeneous (all of the same color) consistency is obtained. should be continued for a while. Do not apply the mixed material from the packaging container! The resulting mixture should be transferred to another clean container and the mixing process repeated carefully.

**Thinner:** --

**Thinning ratio:** --

**Waiting time between coats (23 0 C Ambient and Ground Temperature):** Minimum 24 hours.

Note: When shortening the waiting time between coats, the floor should be roughened with sandpaper for good adhesion.

**Application:** Epoxy Topcoat can be applied with brush, roller and spray gun. Thinner is used for thinning when applied by spraying and the paint is thinned to a viscosity of 18 - 20 seconds (DIN CUP 4, 20 ° C) and applied 2-3 times over wet with a gun to give 35-40 m dry film. In the application of the paint in closed places, the environment should be well ventilated.

### Cleaning of Tools

Clean all tools and application equipment with thinner immediately after use. Hardened/cured material can only be mechanically removed.

### Application and Consumption

Depending on the surface quality and absorbency, T-POX 3400 CR A + B mixture consumption is approximately

Corrosion protection coating:

T-POX 3400 CR is applied in 2-3 coats by roller, brush or spraying method.

Consumption: ~ 400 g / m<sup>2</sup> (per layer)

Application by roller method (thin coating):

Lining: T-POX 2800 primer

Consumption: ~ 300-500 g / m<sup>2</sup> T-POX 3400 CR is applied in 2-3 coats by roller.

Consumption: ~ 400-500 g / m<sup>2</sup> (per layer)

Hedgehog roller is applied to avoid air bubbles.

Note: For outdoor applications or if the time between the applied layers is long, 0.1-0.4 mm or 0.2-0.7 mm quartz sand is sprinkled on the wet layer. This ensures good adhesion between the layers.

Thick coating:

Lining: T-POX 2800 primer

Consumption: 30% quartz sand (0.2-0.7 mm) is added to T-POX3400 CR mixture ~ 300-600 g / m<sup>2</sup>.

Consumption: ~ 1.2 kg / m<sup>2</sup> T-POX 3400 CR

\* Coverage increases as the viscosity gets higher at lower temperature.

### Important Notices:

-The application temperature should not be below 10°C, it should not exceed 40°C.

-High temperatures shorten the processing life and low temperatures extend this process and curing time. Material consumption increases at low temperatures.

-In order to extend the processing time at high temperatures, the material should be stored in a cool environment above 10°C until shortly before mixing.

- Between two coats of adherence, the surface is affected by contamination and moisture exposure.

-If there will be long waiting times between the application phases or if the surfaces will be re-coated after a long time, the old surface should be cleaned and sanded thoroughly. After this process is completed, the new coating is applied to the surface. Single coat application will not be enough.

- After application, the surface should be protected from moisture and rain for 4-6 hours. Moisture causes discolouration and / or an adhesive surface. In addition, the surface hardening may cause defects. In such cases, the surface should be sanded and re-applied.

#### Health and Safety Information

The following protective measures should be taken when working with the material: Wear safety gloves, goggles and protective clothing. Because of irritation effects of the uncured material, components should not come in contact with the skin, or eyes. In cases of contact the affected area should be washed with plenty of water and soap. If swallowed, seek medical attention immediately. Do not drink or eat at the application site. Keep out of reach of children.

#### Product Liability

Momentum is just responsible for the quality of the Momentum labelled products. All the data referred herein are gathered as a result of practical and scientific studies. Momentum cannot be legally obligated or responsible for any damage unless correct product is used accurately in suitable areas and under right conditions.

#### Legal Notes

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