chester molecular®

**Technical Data Sheet**

September ٢٠١٥

# *Chester Surface Protector A*

## *DESCRIPTION:*

Chester Surface Protector A is a two-element **liquid** epoxy-novolac composite. Contains modified epoxy-novolac resins and barriers fillers. Product is designed to protect metal and concrete surfaces from aggressive chemicals mediums at higher temp. Cures at room temperature. ١٠٠٪ Solids.

## *TYPICAL APPLICATION:*

- **CORROSION PROTECTION OF METAL AND CONCRETE SURFACES**
- **TANKS**
- **PIPELINE COATINGS**
- **MARINE BUOYS**
- **EFFLUENT TANKS AND CHANNELS**

| *Technical data* | | | | |
|---|---|---|---|---|
| Cured Density | ----- | ----- | **١,٢ g/cm$^3$** | |
| Mix Ratio by Volume | ----- | ----- | **whole pack** | |
| Mix Ratio by Weight | ----- | ----- | **٢ : ١** | |
| Color | | | **black** | |
| Temperature Resistance Wet | ----- | ----- | **٦٠ $^{O}$C** | **١٧٦ $^{O}$F** |
| Temperature Resistance Dry | ----- | ----- | **٨٠ $^{O}$C** | **٢٤٨ $^{O}$F** |
| Minimal Working Temperature | ----- | ----- | **-٥٠ $^{O}$C** | **-٥٨ $^{O}$F** |
| Working Life (٦٨ $^{O}$F)(٢٠ $^{O}$C) | ----- | ----- | **٣,٥ h** | |
| Time to apply ٢$^{nd}$ layer | ----- | ----- | **٢٤ h** | |
| Chemical resistance in ٢٠ $^{O}$C | | | **٧ days** | |

## *DIRECTIONS FOR USE*

### *Conditions during the application.*

The product is not recommended to apply when the ambient temperature is below ٥$^{O}$C and the relative humidity is above ٩٠٪ or when condensation occurs on the surface to be repaired.

### *Metal surface preparation.*

The surface in the part to be repaired shall be degreased chemically or by gas-jet, then mechanically cleaned by means of blast cleaning, sanding, or with the help of the abrasive paper, grinders, pin-lift grinding wheels, etc. You should always aim at thoroughly remove all loose contamination and make the surface roughened. A correctly prepared surface shall be degreased using for ex. Chester Fast Cleaner F-٧ or Chester Ultra Fast Degreaser F-٦.

### *Concrete surface preparation*

The concrete surface should be dry, dust removal and cleaned from small concrete parts. New concrete must not have more than ٢٨ days, and cleaned from "cement wash". Light precipitation of surface is allowed.

### *Mixing and application of the composition.*

The contents of the container marked **Reactor** pour it into a container labeled **Base**. Mix both components until obtaining a uniform color.

Once the mix was prepared it should be directly applied, because curing starts immediately and every late could weaken the adhesion.

Two coats of ٠,٥ – ٠,٦ mm thickness are recommended for applying. As the second coat of the material must be applied, the first one can not be fully cured. Recommended is using of brush or roller for applying this material. to obtain the best properties of the coating application should be carried out at a temperature of ١٠ $^{O}$C -٣٠ $^{O}$C

## *Chester Surface Protector A*

### *Coverage rate*

Using ١kg of the product you can obtain ١,٦٧ m$^2$ coat of ٠,٥ mm thickness.

To cover a surface of ١m$^2$ of ٠,٥ mm thickness - you need ٠,٦ kg of the product.

Values given above are theoretical ones. In practice because of various roughness of the surfaces,

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decrements, irregularity – efficiency of the product may differ by +/- ١٥٪

### *CURE TIME ACCORDING TO THE TEMPERATURE*

| Ambient temperature °C (°F) | Time for application [h] |
|---|---|
| ١٠ (٥٠) | ٤,٥ |
| ٢٠ (٦٨) | ٣,٥ |
| ٣٠ (٨٦) | ٢,٠ |

It should be remembered that the rate of the reaction significantly depends, apart from the ambient temperature, on the quantity of the used material (the bigger mass of the mixed material, the reaction rate increases). The above presented times refer to the mass of ٠.٢٥ kg of the composite.

### CHEMICAL RESISTANCE

Tests were carried at the temperature of ٢٠°C (٦٨°F). The tests were carried after ٧ days of curing at the temperature of ٢٠°C (٦٨°F).

١ – Prolonged immersion
٢ – Short-term immersion
٣ – Not recommended

| Medium | Odporność chemiczna |
|---|---|
| Nitric acid ١٥٪ | ١ |
| Phosphoric acid ١٠٪ | ١ |
| Acetic acid ٥٪ | ١ |
| Amines up to ٢٠٪ | ١ |
| Hydrochloric acid ١٥٪ | ١ |
| Ammonia **٢٠٪** | ١ |
| Water ٦٠°C(١٤٠oF) | ١ |
| Sea water | ١ |
| Ethanol | ٢ |
| Phenol **٥٪** | ١ |
| Acetone | ٣ |
| Methylene Chloride | ٣ |

Full table of chemical resistance is on the website[http://www.chester.com.pl/GBA/multimedia/٢/٥١/](http://www.chester.com.pl/GBA/multimedia/٢/٥١/)

### *OTHER INFORMATION*

### *Colors/dyes*

The product should be stored in original packaging at temperature between +٠°C (32 °F) to +30°C (86 °F).

ISO 9001:2000

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