

Chester Coating EHT

DESCRIPTION:

Chester Coating EHT is a two-component, fluid coating material applied by airless spaying. It can also be applied with a brush. The material contains modified epoxy-novolac resins, barrier fillers and anti-corrosive pigments. Designed to protect metal and concrete surfaces against chemicals also in elevated temperatures. The product contains 100% solids. Cures at room temperature.

TYPICAL APPLICATION:

- PROTECTION OF STORAGE TANKS
- PROTECTION OF FLUES
- PROTECTION OF PIPELINES
- PROTECTION OF SEWERS AND SEWAGE TANKS

Technical data

Cured Density	-----	-----	1,18±0,05 g/cm³	
Mix Ratio by Volume	-----	-----	whole pack	
Mix Ratio by Weight	-----	-----	3 : 1	
Color			dark pink	
Tensile Shear (Stainless Steel)	ASTM 1002	ISO 4587	18,5 MPa	2755 psi
Tensile Shear (Mild Steel)	ASTM 1002	ISO 4587	21,1 MPa	3060 psi
Tensile Shear (Aluminum)	ASTM 1002	ISO 4587	13,5 MPa	1958 psi
Tensile Shear (Brass)	ASTM 1002	ISO 4587	16,5 MPa	2393 psi
Temperature Resistance Wet	-----	-----	80°C	176 °F
Temperature Resistance Dry	-----	-----	150°C	302 °F
Minimal Working Temperature	-----	-----	-50°C	- 58 °F
Working Life (68°F)(20°C)	-----	-----	70 min	
Cured Hardness	ASTM D2240	-----	70 ShD	
Time to apply next layer	-----	-----	4-15h	

DIRECTIONS FOR USE

Conditions during the application.

The product is not recommended to apply when the ambient temperature is below 15°C (59°F) and the relative humidity is above 90% or when condensation occurs on the surface to be repaired.

Metal surface preparation.

From the surface to be protect you need to delete all kinds of impurities, grease, oil, loose corrosion products, old paint coatings. For pre-cleaning is recommended to use the product Cleanrex, Cleanrex II, Fast Cleaner F-7. The surface of the part to be repaired should be degreased chemically or with a gas burner and mechanically cleaned - by shot blasting, sandblasting or with the use of angle grinders, pin grinding wheels, sandpaper, etc. and then if necessary

degrease using the e.g. Chester Fast Cleaner F-7 or Ultra Fast Degreaser F-6. You should always strive to thoroughly remove impurities and make the surface rough.

Concrete surface preparation

The surface must be clean and dust-free and free from loose pieces of concrete. New concrete must be cured for at least 28 days and cleaned of the cement wash. A slight surface dampness is allowed.

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Mixing and application of the composition.

Both components should be mixed in original containers to obtain uniform color with the use of low-speed mixer. It is advisable to mix the full content of the package. Application should be done immediately after preparation of the mixture. It is recommended to apply 2 layers with a thickness of 0,4 – 0,5 mm.

Applications must be carried out at 15°C-30°C (59– 86°F).

Airless parameters

Pressure	19MPa (2756 psi)
Nozzle	517
Filter in the gun	50 mesh

Coverage rate

Using 1kg of the product you can obtain 1,89 m² coat of 0,45 mm thickness.

To cover a surface of 1m² of 0,45 mm thickness - you need 0,53 kg of the product.

Values given above are theoretical ones. In practice because of various roughness of the surfaces, decrements, irregularity – efficiency of the product may differ by ±15%

Post curing

Post curing at a temperature of 80-100°C (176-212°F) for minimum 2h, after initial cure considerably improves mechanical properties, heat and chemical resistance. Optimal curing process: 7 days in 20°C (68°F) and post-curing at 100°C (212°F) for 4 hours.

CURE TIME ACCORDING TO THE TEMPERATURE

Ambient temperature °C (°F)	Working life [min]
15 (59)	90
20 (68)	75
30 (86)	40

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 0,1 kg of the composite.

CHEMICAL RESISTANCE

The samples were subjected to optimal curing process. Unless otherwise stated, the tests were carried out at 20 °C (68°F). The tests were carried after 7 days of curing at the temperature of 20°C (68°F).

- 1 – Prolonged immersion
- 2 – Short-term immersion
- 3 – Not recommended

Solvent	Chemical resistance
Petrol	1
Diesel fuel	1
Coolant	1
Motor oil	1
Petroleum	1
Nitric acid 10 %	1
Phosphoric acid 10%	1
Acetic acid 5%	2
Amines up to 20%	1
Hydrochloric acid 10%	1
Ammonia 20%	1
Water 60°C(140 °F)	1
Sea water	1
Sodium hydroxide 40%	1
Acetate	3
Methylene Chloride	3

OTHER INFORMATION

Storage

The product should be stored in original packaging at temperature between +0°C (32 °F) to +30°C (86 °F).