

## CHING-HYDRO-EP-zinc dust-Primer HEM 152

### Intended use

Low-solvent, fast-drying zinc dust primer based on epoxy resin (zinc content:  $\geq 94\%$ ) with high resistance for steel structures in heavy corrosion protection.

### Application

Metal and mechanical engineering, industrial halls, airport buildings, warehouses, multi-storey car parks, chemical plants, pipe bridges, power stations, bridge constructions, etc.

### General information

	<b>Color shades</b>	Grey, reddish grey			
	<b>Gloss</b>	mat			
	<b>Mixing ratio</b>	<b>Hardener</b>	<b>per weight</b> [Paint : Hardener]	<b>per volume</b> [Paint : Hardener]	
		Hardener HM 121	100 : 9	100 : 33	
	<b>Pot life</b>	approx. 3 h	NC 23°C/50%   End of pot life not visible! Exceeding the pot life causes a reduction of technological values.		
	<b>Stirring / Dilution</b>	Stir the product mechanically before each use. Ready to use after adding hardener. When mechanically stirring in the hardener, the viscosity will increase temporarily. After adding the hardener and adjusting the processing viscosity, allow the mixture to degas for at least 10 minutes. Dilute with deion. Water if necessary.			
	<b>Spraying</b>	<b>Viscosity</b> [DIN 4]	<b>Thinner</b> [%]	<b>Nozzle</b> [mm]	<b>Pressure</b> [bar]
	Cup gun	40 - 90 s	3 - 5	2,5	4 - 5
	Airless (Airmix)	Delivery form	$\leq 5$	0,28 - 0,45	140 - 240
	<b>Brush application</b>	Delivery form			
	<b>Roller application</b>	Delivery form (multiple application is recommended due to structure formation and minimum layer thicknesses)			
	<b>Flow application</b>	n.a.			



**Substrate preparation**

according to DIN EN ISO 12944-4; Steel, blasted Sa 2½ (to Sa 3) with edged abrasive, roughness degree according to EN ISO 8503-1 medium (G), roughness depth Rz 50-70µm



**Viscosity delivery form**

25 - 45 DIN-6-seconds



**Drying time<sup>1</sup>**

**Temperature**

**Dust-dry**

**Grip resistant**

**Mech. resilient**

**Recoatable<sup>2</sup>**

at 70 µm

NC 23/50

45 min.

4 h

18 h

4 h<sup>3</sup>  
6 h<sup>4</sup>  
24 h<sup>5</sup>

- 1 Based on delivery viscosity! Humidity has a decisive influence on drying!
- 2 with itself (not normally required for top and final coats, except possibly for minimum coat thicknesses)
- 3 with e.g. HEM 33 CHING-HYDRO-EP-intermediate coating
- 4 with e.g. HAD 47 CHING-HYDRO-PUR-top coat
- 5 with e.g. HV 186 CHING-HYDROVERSAL-primer or HV 43/47 CHING-HYDROVERSAL-top coats



**Other values**

**Density**  
[g/cm<sup>3</sup>]

**Solids**  
[Weight. %]

**Solid volume**  
[%]  
[cm<sup>3</sup>/kg]

**Efficiency<sup>1</sup>**  
[m<sup>2</sup>/kg]

2,7 ± 0,1

85 ± 3

60 ± 3

220 ± 20

3,0

**WFF**

**DFT<sup>2</sup>**  
[µm]

**Consume**  
[g/m<sup>2</sup>]

**VOC-content**  
[g/l] (± 20)

**Temperature resistance<sup>3</sup>**

1,7

60 - 80

320 ± 20

300

140°C

These values are imputed values that may vary depending on the color shade and application. Drying times are correspondingly longer for thicker layers. The drying times are shortened by forced drying.

- <sup>1</sup> ± 0,5 for 70 µm dry layer thickness (depending on shade)
- <sup>2</sup> With layer thicknesses > - µm bubbles may form!
- <sup>3</sup> Dry heat



**Notes**

- **Storage**  
18 months (in unopened original container. Store cool but frost protected!)
- **Processing conditions**
  - ❖ The air and object temperature should be at +10°C to +40°C (optimally at 15-35 °C) and the relative humidity at max. 80 %. The surface temperature of the parts to be coated must be at least 3 °C above the dew point of the surrounding air during application.
  - ❖ Sufficient supply and exhaust air must be provided.
  - ❖ Experience has shown that the coating system is suitable for vapour phase drying and for operating temperatures of transformers, whereby the specified layer thickness must not exceed by more than double!
  - ❖ The equipments (e.g. spray gun, stirring unit, etc.) should be cleaned with water (tap water) immediately after use. The sooner the cleaning work is one, the better the cleaning effect. Dried material can be cleaned with CHING-Thinner EM 01.