

HEMUDUR* ZINC 18562

ZINC POWDER 97170
CURING AGENT 97700

Description: HEMUDUR ZINC 1856 is a three-component, water-borne, zinc rich epoxy primer. It cures to a strong and anti-corrosive coating that offers cathodic protection of local mechanical damage.

Recommended use: In moderately to severely atmospheric exposure as an anticorrosive primer for water-borne paint systems (see REMARKS overleaf).

Service temperatures: Maximum, dry: 140°C/284°F.

Availability: Subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos: Grey/19840
Finish: Flat
Volume solids: 49%
Theoretical spreading rate: 9.8 m²/litre - 50 micron
393 sq.ft/US gallon - 2 mils
Flash point: > 66°C/151°F
Specific gravity: 2.4 kg/litre - 20.0 lbs/US gallon
Surface dry: 2 (approx.) hours at 20°C/68°F (ISO 1517)
Dry to touch: 4 (approx.) hours at 20°C/68°F
Fully cured: 7 days at 20°C/68°F
V.O.C.: 7 g/litre - 0.1 lbs/US gallon
12 g/litre - 0.1 lbs/US gallon (ASTM D 3960)

*The physical constants are subject to normal manufacturing tolerances.
Further reference is made to "Explanatory Notes" in the Hempel Book.*

APPLICATION DETAILS:

Mixing ratio for 18562: BASE 18569, 4.7 parts by volume : ZINC POWDER, 16.2 parts by weight (totally 7.0 parts by volume) : CURING AGENT 97700, 3.0 parts by volume
Pour ZINC POWDER 97170 through a strainer and add it slowly to BASE 18569. Stir constantly with an efficient mechanical mixer and continue until a homogeneous mixture is obtained. Then mix with CURING AGENT 97700.

Application method: Airless spray Brush (touch-up)
Thinner (max.vol.): Fresh water (10%) Fresh water (5%)
Pot life: 4 hrs (20°C/68°F) (See REMARKS overleaf)
1 hr (10°C/50°F)

Nozzle orifice: .015"-.019"
Nozzle pressure: 150 bar/2200 psi
(Airless spray data are indicative and subject to adjustment).

Cleaning of tools: Fresh water (See REMARKS overleaf)
Indicated film thickness, dry: 50 micron/2 mils (See REMARKS overleaf)
Indicated film thickness, wet: 100 micron/4 mils

Recoating: Recoating intervals related to later conditions of exposure:
(50 micron/2 mils dry film thickness of HEMUDUR 1856, steel temp. 20°C/68°F)

	Minimum			Maximum		
	Atmospheric			Atmospheric		
	Mild	Medium	Severe	Mild	Medium	Severe
Recoated with						
HEMUCRYL	4 hours	6 hours	6 hours	None**	1 week**	24 hours**
HEMUDUR	4 hours*	6 hours	6 hours	None**	None**	3 weeks**

* HEMUDUR ZINC 1856 can be recoated with HEMUDUR 1850 with a minimum recoating interval of 10 minutes if both layers are specified in 30 micron/1.2 mils dry film thickness and are dried before applying a third coat.

** The surface must be completely clean before recoating. In the case of "white rust", scrubbing with a stiff brush and plenty of water may be necessary.

If the maximum recoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

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SURFACE PREPARATION:	Remove oil and grease thoroughly with suitable detergent. Remove salt and other contaminants by high pressure fresh water cleaning. Abrasive blasting to Sa 2 ½, SSPC-SP 10 with a sharp-edged surface profile corresponding to Rugotest No. 3, BN9a, Keane-Tator Comparator, 2.0 G/S or ISO Comparator, Medium (G).
APPLICATION CONDITIONS:	Use only where application and curing can proceed at temperatures above 10°C/50°F. Apply on a clean and dry surface with a temperature above the dew point to avoid condensation. Relative humidity: During drying below 80%, preferably between 40-60%. Good ventilation during application and drying is necessary. During drying it is of utmost importance that sufficient ventilation is covering all parts of the surfaces painted. Ventilation requirements to remove the water vapours liberated during application and drying are approx. 75 m³/litre of paint at 20°C/68°F. (Relative humidity of the air supply 40%.)
SUBSEQUENT COAT:	HEMUDUR or HEMUCRYL according to specification.
REMARKS:	Note: If used as anticorrosive protection under insulation of high temperature equipment it is very important that NO moisture can penetrate during slow-down periods. This to avoid risk of "wet corrosion" when the temperature rises.
Application:	For proper film formation the recommended nozzle sizes should be used.
Film thicknesses:	May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence amount of thinning necessary, drying time and recoating interval. Normal range is 30-50 micron/1.2-2.0 mils.
"Edge effect":	As water-borne paints have a high tendency to "withdraw" from sharp edges, etc., proper corrosion protection demands careful rounding of edges and that any joints are completely closed and tight.
Exposure to low temperature shortly after application:	If the painted items will be exposed to humidity/water at temperatures below 10°C/50°F shortly after finishing the paint application, it is of utmost importance for later good performance that the following rules are complied with: <ul style="list-style-type: none">- Excessive film thickness must be avoided- The (last applied) paint layer must dry for at least 24 hours at 20°C/68°F before exposure.
Cleaning of tools:	Tools must be cleaned immediately with fresh water or lukewarm soap water. Dried paint residues may be removed by use of HEMPEL'S NAVI WASH 9933 undiluted or HEMPEL'S TOOL CLEANER 9961.
Shelf life/storage:	Store at temperatures between 5-40°C/41-104°F. The shelf life is reduced at temperatures above 30°C/86°F. Do not expose to frost during storage and transport.
Pot life:	The pot life time is not visible eg by an increase in viscosity. Although the paint still looks usable after 4 hours at 20°C/68°F, it is important that the paint is no longer used as its protective properties are dramatically reduced after this time. Be aware that the pot life will decrease when the temperature decreases eg to 1 hour at 10°C/50°F. Use eg an alarm clock to tell when the pot life has been passed. Temperatures indicated are understood as the common temperature for both paint material and the steel to be painted.
HEMUDUR ZINC 1856 is for professional use only.	
SAFETY:	Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Harmful or fatal if swallowed; immediately seek medical assistance if swallowed. Avoid inhalation of possible solvent vapours or paint mist, as well as paint contact with skin and eyes. Apply only in well ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.

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