

CMP EPIZINC 850

Product description:

This is a high solid two component polyamide cured high zinc epoxy coating. It conforms to the compositional requirements of SSPC paint 30, level 3 and ISO 12944-5. It provides good corrosion protection as part of a complete coating system. To be used as primer in atmospheric environments. Suitable for carbon steel, repair of inorganic zinc silicate coating and damaged galvanized steel substrates. This product complies with ASTM D520 type III zinc dust.

Typical use:

Protective:

Suitable for structural steel and piping exposed in corrosivity categories up to CX (ISO 12944-9). Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel. Specially designed as a primer for coating systems where extended durability is required.

Certificates / approvals:

Certificates and approvals may be available on request.

ISO 12944-9 --> CX

ISO 12944-6 --> up to C5VH

Physical Data: (Mixed product)

Number of components:	Two Pack Product	
Colours:	Grey	
Gloss:	Semi-gloss	
Volume solids %:	74 ±2	(ISO 3233-3)
Theoretical spreading rate:	12,4m ² /l	
Flash point:	Not Applicable	(ISO 3679)
Specific gravity:	3.10 kg/l	
Dry to touch:	1 hour at 20 °C	(ISO 9117-4)
Hard dry:	12 hours at 20 °C	(ISO 9117-4)
VOC (Theoretical):	286 g/l	

Recommended substrate conditions:

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2019.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007). If oxidation has occurred between blasting and application of CMP EPIZINC 850, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

A surface profile of Rz5 40-75 microns is recommended.

Shop Primed Steelwork

CMP EPIZINC 850 is suitable for application to unweathered steelwork freshly coated with zinc silicate shop primers.

If the zinc shop primer shows extensive or widely scattered breakdown, or excessive zinc corrosion products, overall sweep blasting will be necessary.

Other types of shop primer are not suitable for overcoating and will require complete removal by abrasive blast cleaning.

Weld seams and damaged areas should be cleaned to a minimum St3 (ISO 8501-1:2007) Optimum performance will be achieved with blasting to Sa2½ (ISO 8501-1:2007)

Mixing

Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed it must be used within the working pot life specified.

(1) Agitate Base (Part A) with a power agitator.

(2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.

Application conditions

Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. Use only where application and curing can proceed at temperatures above: 10°C. The temperature of the paint itself should be: 15-25°C. In confined spaces provide adequate ventilation during application and drying. It is important that the surface is completely clean to ensure the adhesion. Any oil, grease, etc. to be removed by suitable detergent.

Application data:

Version, mixed products	CMP EPIZINC 850
Recommended Thinner:	CMP EP THINNER
Mixing ratio:	Base: Curing agent: 257EE 257EE0000 80 : 20 (by volume) 92 : 8 (by weight)
Application method:	Airless spray, brush, roller*
Recommended thinner volume:	0 - 10%
Nozzle orifice:	0.019 - 0.021"
Nozzle pressure:	18.0 - 25.0 MPa
Indicated film thickness, wet:	Min: 82µm
Indicated film thickness, dry:	Min: 60µm
Min. Temperature:	10°C °C
Pot life:	3 hours @ 20 °C

Humidity:	85% R.H.
Overcoat interval, min:	See ADDITIONAL APPLICATION DATA
Overcoat interval, max:	See ADDITIONAL APPLICATION DATA

Add the Curing agent to the base whilst mixing. Stir well before use.

Notes: * In case of brush or roller application more layers may be required to achieve the specified film thickness. When painting edges and welds, stripe coating is recommended.

Additional application data:

Overcoating intervals related to later conditions of exposure: If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion. Before overcoating after exposure in contaminated environment, clean the surface thoroughly with high pressure fresh water hosing and allow drying. A completely clean surface is mandatory to ensure intercoat adhesion, especially at long overcoating intervals. Any dirt, oil, grease, and other foreign matter must be removed with suitable detergent followed by (high pressure) fresh water cleaning. Salts to be removed by fresh water hosing. Any degraded surface layer, as a result of a long exposure period, must be removed. Water jetting may be relevant to remove any degraded surface layer and may also replace the above mentioned cleaning methods when properly executed. Consult Chugoku Paints B.V. for specific advice if in doubt. To check whether the quality of the surface cleaning is adequate, a test patch may be relevant. However, this test patch should not be a final proof of the durability of the coating systems. In order to ensure good anti-corrosive performance, it is important to achieve a minimum dry film thickness of CMP EPIZINC 850 of 50 microns. To achieve a uniform, coalesced, closed film at this dry film thickness, it will be necessary to thin CMP EPIZINC 850 10% by volume with CMP EP THINNER. The film thickness of CMP EPIZINC 850 applied must be compatible with the blast profile achieved during surface preparation. Low film thickness should not be applied over coarse blast profiles.

Care should be exercised to avoid the application of dry film thicknesses in excess of 150 microns. Care should be exercised to avoid over-application, which may result in cohesive film failure with subsequent high builds, and to avoid dry spray which can lead to pin holing of subsequent coats. Over application will also result in slower curing and extended handling and overcoating times. Over application of CMP EPIZINC 850 will extend both the minimum overcoating periods and handling times, and may be detrimental to long term overcoating properties.

Curing time and over-coating data:

Temp.	Surface dry (at 60µ DFT)	Hard dry (at 60µ DFT)	Fully cured (at 60µ DFT)	Over-coating Interval Min.	Over-coating Interval Max.	Pot life
-5 °C	-	-	-	-	-	-
0 °C	-	-	-	-	-	-
5 °C	-	-	-	-	-	-
10 °C	2 hours	24 hours	7 days	24 hours	Extended	5 hours
20 °C	1 hour	12 hours	7 days	12 hours	Extended	3 hours
30 °C	30 min	6 hours	7 days	6 hours	Extended	2 hours

When CMP EPIZINC 850 is allowed to weather before top coating ensure all zinc salts are removed prior to paint application and only topcoat with recommended materials. Surface temperature must always be a minimum of 3°C above dew point.

Spreading rates:

Dry Film Thickness	Theoretical Spreading rate
60 µm	12,4 m ² /l
80 µm	9,3 m ² /l
100 µm	7,4 m ² /l

Storage:

12 months minimum at 25°C. Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Color variation:

When applicable, products may have slight color variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

Color and gloss retention on topcoats/finish coats may vary depending on type of color, exposure environment such as temperature, UV intensity etc., and application quality. Contact your local Chugoku Paints B.V. office for further information.

Safety information:

If Health, Safety and Environmental information is required a Health and Safety Data Sheet can be obtained from Chugoku Paints B.V.

Personal Protection advice and additional information can be obtained from the product Health and Safety Data Sheet which is available on request. The minimum safety precautions in dealing with this paint are:

- Observe the precautionary notices displayed on the container.
- Provide adequate ventilation.
- Avoid skin contact and inhalation of spray mist and vapours.
- If the product comes into contact with the skin, wash thoroughly with luke warm water and soap or suitable cleaner. If the eyes are contaminated, irrigate with water and seek medical advice immediately.
- Since the product contains flammable materials, keep away from sparks and open flames. No smoking should be permitted in the area.

Definitions:

Tolerances:	The numerical information quoted in this Technical Data Sheet is subject to normal manufacturing tolerances.
Spreading Rate:	The spreading rate can vary depending on application conditions, the geometrical complexity of the structure, the weather conditions, etc.
Volume Solids:	The volume solids figure given in this Technical Data Sheet is the percentage of dry film obtained from a given wet film thickness under specified application rate and conditions measured by the Chugoku Standard Method corresponding to ASTM method D2697 if not otherwise indicated.
Overcoating Intervals:	The intervals given assume preparation consistent with good painting
Hard dry:	The time taken until the product can be walked on without damaging it. Time taken until full mechanical strength is obtained is longer.
V.O.C.:	Theoretical quantity of volatile organic compounds in g/l.

Disclaimer:

Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user. Product data is subject to change without notice and automatically void two years from issue. All legal relations of Chugoku Paints B.V. will be governed by the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. as last filed with the district court of Rotterdam and upon request they will be made available without charge. Chugoku Paints B.V. explicitly rejects the applicability of any General Conditions, which its contractual parties may use. Exclusive jurisdiction: competent Court in Rotterdam.

The Inspector will undertake to the best of their ability, to carry out assistance during application of the products delivered by Chugoku, by only rendering advice in connection with the application at site. The Inspector undertakes to carry out the project in a conscientious manner, but Chugoku and/or the Inspector will not accept any kind of liability, direct or indirect, if the project does not give the results expected. Under all circumstances, the Buyer remains responsible for the execution of the project. Any advice and/or assistance rendered by the Inspector will be subject to such (final) responsibility of the buyer, and moreover subject to the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. Even when damages or delays have been caused by faults or negligence on the side of Chugoku and/or the Inspector, such will not result in any liability whatsoever of Chugoku or the Inspector. Liability of both Chugoku or the Inspector for any consequential damages is explicitly excluded. Some products have been specially modified to adapt to specific European requirements with regard to European-, national- and local laws and regulations or with regards to specific European use requirements. As a result some physical properties in a TDS may differ from those given in the original Japanese TDS.