CHUGOKU PAINTS B.V.

CMP PU FINISH ZP SG

Product description:
A two component DTM Polyurethane semi-gloss, fast curing, self-priming topcoat containing zinc phosphate.

Typical use:
Specifically designed as a DTM primer/finish coating to be used for mining heavy machinery, agricultural equipment, railcars, transportation vehicles, material handling and lifting equipment, pumps, valves, gear units and other machinery.
CMP PU FINISH ZP SG characteristics:
- Good adhesion properties over correctly prepared steel, galvanized steel and stainless steel.
- Good gloss and color retention.
- Versatile application thickness to allow single or two coat applications.

Certificates / approvals:
Certificates and approvals may be available on request.
ISO 12944-6 --> C5 h
ISO 2812-1 --> chemical resistant

Physical Data: (Mixed product)

Number of components:	Two Pack Product	
Colours:	Various colours including RAL references.	
Gloss:	Semi-gloss	
Volume solids %:	62 ±2	(ISO 3233-3)
Theoretical spreading rate:	8,3m²/l	
Flash point:	42°C (Mix)	(ISO 3679)
Specific gravity:	1.15 kg/l - 1.35 kg/l (depends on colour)	
Dry to touch:	30 min at 20 °C	(ISO 9117-4)
Hard dry:	8 hours at 20 °C	(ISO 9117-4)
VOC (Theoretical):	350 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 PU FINISH ZP SG, 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.

Stainless Steel, Galvanized Steel and Aluminium:
Remove dirt and oils by solvent cleaning or other suitable detergent/cleaner followed by a thorough water rinsing. Sand or abrasive sweep blast to a standard similar to ISO 8501-1:2007 Sa1 to create a surface profile.
Primed Surfaces
The primer surface should be dry and free from all contamination and CMP PU FINISH ZP SG must be applied within the overcoating intervals specified (consult the relevant product data sheet). Areas of breakdown, damage etc., should be prepared to the specified standard and patch primed prior to the application of CMP PU FINISH ZP SG.

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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 data:

Version, mixed products	CMP PU FINISH SG
Recommended Thinner:	CMP PU THINNER
Mixing ratio:	Base: Curing agent: 442PU 542PU0000 86 : 14 (by volume) 90 : 10 (by weight)
Application method:	Airless spray, brush and roller
Recommended thinner volume:	0 - 15%
Nozzle orifice:	0.013 - 0.015"
Nozzle pressure:	18.0 - 25.0 Mpa
Indicated film thickness, wet:	Min: 121µm
Indicated film thickness, dry:	Min: 75µm
Min.Temperature:	-5 °C
Pot life:	12 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:

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: -5°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.

Overcoating
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.

Curing time and over-coating data:

Temp.	Surface dry (at 50µ DFT)	Hard dry (at 50µ DFT)	Fully cured (at 50µ DFT)	Over-coating Interval Min.	Over-coating Interval Max.	Pot life
-5 °C	**3.5 hours**	**60 hours**	**7 days**	**8 hours**	**180 days**	**24 hours**
0 °C	**2 hours**	**40 hours**	**7 days**	**6 hours**	**180 days**	**24 hours**
5 °C	**1 hour**	**24 hours**	**7 days**	**5 hours**	**180 days**	**24 hours**
10 °C	**40 min**	**12 hours**	**7 days**	**4 hours**	**180 days**	**20 hours**
20 °C	**30 min**	**8 hours**	**7 days**	**3 hours**	**180 days**	**16 hours**
30 °C	**20 min**	**6 hours**	**7 days**	**2.5 hours**	**180 days**	**8 hours**

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Spreading rates:

Dry Film Thickness	Theoretical Spreading rate
50 µm	12,4 m²/l
75 µm	8,3 m²/l
100 µm	6,2 m²/l

Storage:

Min. 24 months at 20°C. Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition. Elevated storage temperatures reduce shelf life.

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.
For certain colours extra coats may be necessary to obtain full opacity.
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:

a. Observe the precautionary notices displayed on the container.
b. Provide adequate ventilation.
c. Avoid skin contact and inhalation of spray mist and vapours.
d. 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.
e. 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.