



# UNY MARINE HS M

**Product description:**

UNY MARINE HS M, based on an acrylic polyol and non-yellowing poly-isocyanates, is a high-solid type topcoat. It has the following advantages:

- Excellent durability while maintaining tough paint film for a long term,
- Excellent weather resistance (gloss retention),
- Excellent adhesion to preceding coats,
- Excellent physical properties such as toughness, impact and abrasion resistance,
- Excellent resistance to oil and chemicals,
- Re-coatable.

**TECHNICAL DATA**

<b>Type:</b>	Polyurethane finish paint, high build
<b>Recommended use:</b>	Finish coat for chemical, petrochemical & power plants, offshore, bridges, wind towers, piping under insulation and other steel structures.

<b>Surface Preparation:</b>	The surface to be painted must be clean, free from rust, dirt, oil, grease or other foreign matter using power wash, detergent or solvent wipe.
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<b>Physical Data: (Mix)</b>	Colour:	White, as specified.		
	Flash point:	16°C (Mix)		
	Volume solids %:	66	±2	(ISO : 3233 (1998))
	VOC (g/l):	314	Theoretical	

<b>Application Details:</b>	Mixing ratio:	Base: 88	Hardener: 12	(by volume)
	Mixing ratio:	Base: 90	Hardener: 10	(by weight)
	Thinner:	URETHANE THINNER A		
	Min. Temperature:	-5 °C		
	Max. humidity:	85% R.H.		
	Application Data:	Airless spray, brush, roller		
	Add the hardener to the base whilst mixing. Stir well before use.			

<b>For airless spray:</b>	 Tip No.:	Graco 515, 615, 715		
	Paint output pressure:	14.7 - 23.5 MPa		
	 Thinning:	0 - 15% (by volume)		

<b>Film thickness and spreading rate:</b>		Min.	Max.	
	Film Thickness, wet:	76	114	µm
	Film Thickness, dry:	50	75	µm
	Spreading Rate:	13,2	8,8	m <sup>2</sup> /l (theoretical)

<b>Preferable preceding coating:</b>	BANNOH series, UMEGUARD series, EPICON series, CMP FLAMECHECK SS-2800.
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<b>Preferable subsequent coating:</b>	-
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<b>Packing:</b>	Two Pack Product
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Notes: The performance of the hardener decreases reacting with moisture, please handle with care.



### Overcoatability

Temperature	Drying time (at DFT 70 µ)	Overcoating interval (at DFT 70 µ)	Induction time	Pot life	Remarks
-5 °C	Surface dry:3,5 hours Hard dry 60 hours	Min.: 60 hrs Max.: *	30 min.	24 hours	-
0 °C	Surface dry:2 hours Hard dry 40 hours	Min.: 40 hrs Max.: *	30 min.	24 hours	-
5 °C	Surface dry:1 hour Hard dry 24 hours	Min.: 24 hours Max.: *	30 min	24 hours	-
10 °C	Surface dry:40 min Hard dry 12 hours	Min.: 12 hours Max.: *	30 min	20 hours	-
20 °C	Surface dry:30 min Hard dry 8 hours	Min.: 8 hours Max.: *	30 min	16 hours	-
30 °C	Surface dry:20 min Hard dry 6 hours	Min.: 6 hours Max.: *	30 min	8 hours	-

\* Kindly consult with CMP sales office.

**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.
- 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.

<b>Definitions:</b>	<b>Tolerances:</b>	The numerical information quoted in this Technical Data Sheet is subject to normal manufacturing tolerances.
	<b>Spreading Rate:</b>	The spreading rate can vary depending on application conditions, the geometrical complexity of the structure, the weather conditions, etc.
	<b>Volume Solids:</b>	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.
	<b>Overcoating Intervals:</b>	The intervals given assume preparation consistent with good painting
	<b>Hard dry:</b>	The time taken until the product can be walked on without damaging it. Time taken until full mechanical strength is obtained is longer.
	<b>V.O.C.:</b>	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.