



HEMPADUR MASTIC 45880 / HEMPADUR MASTIC 45881

Low to medium temperatures 45880 : BASE 45889: CURING AGENT 95880
High temperatures 45881 : BASE 45889 : CURING AGENT 95881

Description: HEMPADUR MASTIC 45880/45881 is a two-component polyamide adduct cured, high solids, high build epoxy paint. It forms a hard and tough coating, has good wetting properties and low temperature curing.

Recommended use: As a selfprimed, surface tolerant paint system or as an intermediate or finishing coat in heavy duty paint systems where low VOC and high film build are required. Multipurpose coating as per specification for maintenance and minor repairs in immersed areas including ballast tanks and underwater hull specifically in those cases where a need for few products outweighs more specialised coatings. Can be specified where extended recoating properties for polyurethane topcoats are requested (typically travel coating). May be used directly on cured zinc silicate (GALVOSIL products) or spray-metallized surfaces to minimize popping.

Service temperature: Maximum, dry exposure only: 120°C/248°F

Certificates/Approvals: In accordance with Aramco's specification APCS 1, APCS 12, APCS 26 and 26T.

Classified as class 1 material according to BS 476: Part 7: 1997 (fire testing). Tested for non-contamination of grain cargo at the Newcastle Occupational Health & Hygiene, Great Britain. Complies with Section 175.300 of U.S. Federal Regulations in respect of carriage of dry foodstuffs (FDA) in spaces with an internal surface area larger than 1000 m²/10.750 sq.ft. EC-type Examination Certificate: Denmark, France, Indonesia, Malaysia, Singapore, Spain Complies with EU Directive 2004/42/EC: subcategory j.

Availability: Part of Group Assortment. Local availability subject to confirmation.

PHYSICAL CONSTANTS:

Version, mixed product:	45880	45881
Shade nos/Colours:	12170* / Grey.	12170/ Grey.
Finish:	Semi-gloss	Semi-gloss
Volume solids, %:	80 ± 1	80 ± 1
Theoretical spreading rate:	6.4 m ² /l [256.6 sq.ft./US gallon] - 125 micron/5 mils	6.4 m ² /l [256.6 sq.ft./US gallon] - 125 micron/5 mils
Flash point:	39 °C [102.2 °F]	25 °C [77 °F]
Specific gravity:	1.5 kg/litre [12.2 lbs/US gallon]	1.5 kg/litre [12.5 lbs/US gallon]
Dry to touch:	4 approx. hour(s) 20°C/68°F	3 hour(s)
Fully cured:	7 day(s) 20°C/68°F	5 day(s) 30°C/86°F
VOC content:	217 g/l [1.8 lbs/US gallon]	220 g/l [1.8 lbs/US gallon]

*Wide range of colours available via Hempel's MULTI-TINT system.

The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.

APPLICATION DETAILS:

Version, mixed product:	45880	45881
Mixing ratio:	BASE 45889: CURING AGENT 95880 3 : 1 by volume	BASE 45889 : CURING AGENT 95881 3 : 1 by volume
Application method:	Airless spray / Brush	Airless spray / Brush
Thinner (max.vol.):	< 5% HEMPEL'S THINNER 08450, depending on purpose (see REMARKS overleaf)	
Pot life (Airless spray):	1 hour(s) 20°C/68°F	1.5 hour(s) 30°C/86°F
Pot life (Brush):	2 hour(s) 20°C/68°F	2 hour(s) 30°C/86°F
Nozzle orifice:	0.017 - 0.023 " According to separate APPLICATION INSTRUCTIONS	
Nozzle pressure:	250 bar [3625 psi]	
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610	
Indicated film thickness, dry:	125 micron [5 mils] see REMARKS overleaf	
Indicated film thickness, wet:	150 micron [6 mils]	
Recoat interval, min:	According to separate APPLICATION INSTRUCTIONS	According to separate APPLICATION INSTRUCTIONS
Recoat interval, max:	According to separate APPLICATION INSTRUCTIONS	According to separate APPLICATION INSTRUCTIONS

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Safety Data Sheets and follow all local or national safety regulations.



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SURFACE PREPARATION:

New steel: Abrasive blasting to minimum Sa 2½ (ISO 8501-1:2007) with a surface profile corresponding to Rugotest No. 3, N9a to N10, preferably BN9a to BN10, Keane-Tator Comparator, 2.0 G/S or ISO Comparator, Medium (G).

Zinc silicate painted or spray-metallized surfaces: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Zinc salts (white rust) must be removed by high pressure hosing combined with rubbing with a stiff nylon brush if necessary. It is recommended to recoat spray-metallized surfaces as soon as possible to avoid possible contamination.

Concrete: Remove slip agent and other possible contaminants by emulsion washing followed by high pressure hosing with fresh water. Remove scum layer and loose matter to a hard, rough and uniform surface, preferably by abrasive blasting, possibly by other mechanical treatment or acid etching. Seal surface with suitable sealer, as per relevant painting specification.

Repair and maintenance: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Clean damaged areas thoroughly by power tool cleaning to minimum St 2 (spot-repairs) or by abrasive blasting to min. Sa 2, preferably to Sa 2½ (ISO 8501-1:1988). Improved surface preparation will improve the performance of the product. As an alternative to dry cleaning, water jetting to sound, well adhering coat and/or to steel. Intact coat must appear with roughened surface after the water jetting. By water jetting to steel, cleanliness shall be: Wa 2 -Wa 2½ (atmospheric exposure) / minimum Wa 2½ (immersion) (ISO 8501-4:2006). Acceptable flash-rust degree before application: maximum M (atmospheric exposure) / M, preferably L (immersion) (ISO 8501-4:2006).

Feather edges to sound and intact areas. Dust off residues. Touch up to full film thickness. On pit-corroded surfaces, excessive amounts of salt residues may call for high pressure water jetting, wet abrasive blasting, alternatively dry abrasive blasting, high pressure fresh water hosing, drying, and finally dry abrasive blasting again.

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:
HEMPADUR MASTIC 45880: - 5°/23°F, preferably above 0°C/32°F
HEMPADUR MASTIC 45881: 15°C/59°F
The temperature of paint itself should be 15°C/59°F or above. In confined spaces provide adequate ventilation during application and drying.

PRECEDING COAT: None, or as per specification.

SUBSEQUENT COAT: None, or as per specification.

REMARKS:

VOC - EU Directive 2004/42/EC:

Product	As supplied	5 vol. % thinning	Limit phase II, 2010
4588012170	217 g/l	249 g/l	500 g/l
45881 12170	220 g/l	251 g/l	500 g/l

For VOC of other shades, please refer to Safety Data Sheet.

Weathering/service temperatures: The natural tendency of epoxy coatings to chalk in outdoor exposure and to become more sensitive to mechanical damage and chemical exposure at elevated temperatures is also reflected in this product.

Application(s) Application onto zinc silicate or spray-metallized surfaces (thinning): It is recommended to apply the paint by using a "mist-coat" procedure **provided** the paint temperature is approximately above: 20°C/68°F. A thin, diluted coat is applied (the mist coat) and after a few minutes, a second coat is applied in the full specified film thickness. If the paint temperature is below: 20°C/68°F, thinning (max 15%) may be required.

Film thicknesses/thinning: May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence drying time and recoating interval. Normal range dry is: 125-200 micron/5-8 mils. May be specified in lower film thickness for which purpose additional thinning is required, please see separate APPLICATION INSTRUCTIONS. **Avoid application of excessive film thicknesses.**

Shades: The product is also available in a Micaceous Iron Oxide (MIO) pigmented shade (Shade no. 12430 – reddish grey) and in aluminium pigmented shades (Shade nos. 19870 - dark alu and 19000 - light alu).

Nota: **HEMPADUR MASTIC 45880 45881 For professional use only.**

ISSUED BY: HEMPEL A/S
4588012170



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This Product Data Sheet supersedes those previously issued.

For explanations, definitions and scope, see "Explanatory Notes" available on www.hempel.com. Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.

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