

45880: BASE 45889: CURING AGENT 95880

Description:	HEMPADUR MASTIC 45880 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. For immersed areas HEMPADUR MASTIC 45880 is only recommended for minor repairs as primer, and full applications as intermediate or topcoat. 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. Shade 18600 can be used in paint systems complying with European ATEX Regulation EN 13463-1: 2001, please consult Hempel for specification advice. Please also note that Shade 18600 will have a lower gloss than usual for other shades.
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. Tested according to section 175.300 of the Code of Federal Regulations Title 21 - Dry Foodstuff. Consult Hempel for details. Complies with European Fire Standard EN 13501-1; classification B-s1, d0. Tested for non-contamination of grain cargo at the Newcastle Occupational Health & Hygiene, Great Britain. Approved as a low flame spread material when used as part of a predefined paint system. Please refer to "Declaration of Conformity" on www.Hempel.com for further details. Complies with EU Directive 2004/42/EC: subcategory j.
Availability:	Part of Group Assortment. Local availability subject to confirmation.
PHYSICAL CONSTANTS:	
Shade nos/Colours:	12170* / Grey. (see REMARKS overleaf)
Finish:	Semi-gloss
Volume solids, %:	80 ± 1
Theoretical spreading rate:	6.4 m ² /l [256.6 sq.ft./US gallon] - 125 micron/5 mils
Flash point:	25 °C [77 °F]
Specific gravity:	1.5 kg/litre [12.1 lbs/US gallon]
Dry to touch:	3 hour(s) 20°C/68°F
Fully cured:	14 day(s) 10°C/50°F
VOC content:	216 g/l [1.8 lbs/US gallon]
Shelf life:	3 years for BASE and 3 years (25°C/77°F) for CURING AGENT from time of production. <i>*Wide range of colours available via Hempel's MULTI-TINT system.</i> <i>The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.</i>
APPLICATION DETAILS:	
Version, mixed product:	45880
Mixing ratio:	BASE 45889: CURING AGENT 95880 3 :1 by volume
Application method:	Airless spray / Brush
Thinner (max.vol.):	< 5% HEMPEL'S THINNER 08450, depending on purpose (see REMARKS overleaf)
Pot life (Airless spray):	1 hour 20°C/68°F
Pot life (Brush):	2 hour(s) 20°C/68°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]
Overcoat interval, min:	see REMARKS overleaf
Overcoat interval, max:	see REMARKS overleaf
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.

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 or, 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: - 5°/23°F, preferably above 0°C/32°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	216 g/l	248 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, undiluted 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 overcoating interval. Normal range dry is: 100-200 micron/4-8 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).

Overcoating: This product is available in several aluminium pigmented shades with different volume solids content. 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 specification supersedes any guideline overcoat intervals indicated in the table.

Environment	Atmospheric, medium					
	0°C (32°F)		10°C (50°F)		20°C (68°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	54 h	Ext.	18 h	Ext.	6 h	Ext.
HEMPATEX	54 h	4.5 d	18 h	36 h	6 h	12 h
HEMPATHANE	54 h	Ext.	18 h	Ext.	6 h	Ext.
Environment	Immersion					
HEMPADUR	4.5 d	90 d	36 h	90 d	12 h	30 d

NR = Not Recommended, Ext. = Extended, m = minute(s), h = hour(s), d = day(s)

Overcoating intervals: A specification supersedes any guideline overcoat intervals indicated in the table.

Product Data

HEMPADUR MASTIC 45880



Note: **HEMPADUR MASTIC 45880 For professional use only.**
ISSUED BY: HEMPEL A/S

4588012170

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.
The Products are supplied and all technical assistance is given subject to HEMPEL's GENERAL CONDITIONS OF SALES, DELIVERY AND SERVICE, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said GENERAL CONDITIONS for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise. Product data are subject to change without notice and become void five years from the date of issue.