



HEMPADUR MASTIC 45880/ HEMPADUR MASTIC 45881

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

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 including ballast tanks and underwater hull and new steel 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.

As a topcoat where the usual outdoor cosmetic appearance of epoxy paints is acceptable.

Service temperatures:

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

Certificates/Approvals:

Tested for non-contamination of grain cargo at the Newcastle Occupational Health, Great Britain. Complies with Section 175.300 of the Code of 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.

HEMPADUR MASTIC 45881 is 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).

HEMPADUR MASTIC 45880 is approved as a low flame spread material by Danish, French, Spanish, Singaporean, Malaysian and Indonesian authorities according to IMO resolution MSC 61 (67).

Has a French, Spanish, Danish, Singaporean, Malaysian and Indonesian EC-type Examination Certificate.

Complies with EU Directive 2004/42/EC, subcategory j.

Please see REMARKS overleaf.

Availability:

Part of Group Assortment. Local availability subject to confirmation.

PHYSICAL CONSTANTS:

Version, mixed product:
Colours/Shade nos:
Finish:
Volume solids, %:
Theoretical spreading rate:

45880
Grey/12170*
Semi-gloss
77 ± 1
3.9 m²/litre - 200 micron
154 sq.ft./US gallon - 8 mils

45881
Grey/12170*
Semi-gloss
77 ± 1
3.9 m²/litre - 200 micron
154 sq.ft./US gallon - 8 mils

Flash point:
Specific gravity:
Dry to touch:
Fully cured:
V.O.C.:

35°C/95°F
1.4 kg/litre - 11.7 lbs/US gallon
4 (approx) hours at 20°C/68°F
7 days at 20°C/68°F
220 g/litre - 1.8 lbs/US gallon

35°C/95°F
1.4 kg/litre - 11.7 lbs/US gallon
3 (approx) hours at 30°C/86°F
5 days at 30°C/86°F
220 g/litre - 1.8 lbs/US gallon

*Other shades including a MIO version, colour no. 12430, according to assortment list.
The physical constants stated are nominal data according to the HEMPEL Group's approved formulas. They are subject to normal manufacturing tolerances and where stated, being standard deviation according to ISO 3534-1.

APPLICATION DETAILS:

Version:
Mixing ratio:

45880
Base 45889 : Curing agent 95880
3 : 1 by volume

45881
Base 45889 : Curing agent 95881
3 : 1 by volume

Application method:
Thinner (max. vol.):
Pot life:

Airless spray Brush (touch up)
Depending on purpose usually less than 5% THINNER 08450 (See REMARKS overleaf)
1 hour (20°C/68°F) (Airless spray) 1½ hour (30°C/86°F) (Airless spray)
2 hours (20°C/68°F) (Brush) 2 hours (30°C/86°F) (Brush)

Nozzle orifice:
Nozzle pressure:
Cleaning of tools:
Indicated film thickness, dry:
Indicated film thickness, wet:
Recoat interval, min/max:

.017"-.023" (See separate APPLICATION INSTRUCTIONS)
250 bar/3600 psi (Airless spray data are indicative and subject to adjustment)
HEMPEL'S TOOL CLEANER 99610 or HEMPEL'S THINNER 08450
200 micron/8 mils (see REMARKS overleaf)
275 micron/11 mils
According to separate APPLICATION INSTRUCTIONS

Safety:

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas



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SURFACE PREPARATION:

New steel: When used as an intermediate or finishing coat please refer to the data sheet for the preceding GALVOSIL or HEMPADUR primer. When used as a primer please refer to the specification.

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. with suitable detergent. Remove salt 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. Improved surface preparation will improve the performance of HEMPADUR MASTIC 45880/45881. As an alternative to dry cleaning, water jetting to min. Wa 2½ (ISO 8501-4:2006)(or according to specification), may be used. A flash-rust degree of maximum M (ISO 8501-4:2006) is acceptable before application. Feather edges to sound and intact paint. Dust off residues.

On pit-corroded surfaces, excessive amounts of salt residues may call for 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 when application and curing can proceed at temperatures above -5°C/23°F (recommended lowest temperature is 0°C/32°F) for HEMPADUR MASTIC 45880 and above approx 15°C/59°F for HEMPADUR MASTIC 45881. The temperature of the paint itself should be 15°C/59°F or above, but advantageously below approximately 30°C/86°F to secure proper application properties. Optimal spraying properties are obtained at a paint temperature of 18-22°C/64-72°F. In warmer climates, the paint should be stored in a cool place and the paint temperature should preferably be kept below 30°C/86°F. In confined spaces provide adequate ventilation during application and drying. In cases where faster drying at very low temperatures is required, HEMPADUR MASTIC 45880 may advantageously be replaced by HEMPADUR 45143. Please also see separate APPLICATION INSTRUCTIONS.

PRECEDING and SUBSEQUENT COAT: None or according to specification.

REMARKS:

VOC - EU directive 2004/42/EC:

| 45880 | | | | |
|------------|-------------|-------------------|---------------------|----------------------|
| | As supplied | 5 vol. % thinning | Limit phase I, 2007 | Limit phase II, 2010 |
| VOC in g/l | 275 | 305 | 550 | 500 |
| 45881 | | | | |
| | As supplied | 5 vol. % thinning | Limit phase I, 2007 | Limit phase II, 2010 |
| VOC in g/l | 255 | 280 | 550 | 500 |

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

Certificates have been issued under the former quality number 4588.

Colours/Colour-stability:

Certain lead-free red and yellow colours may discolour when exposed to chlorine-containing atmosphere.

Leaded colours may become discoloured when exposed to sulphide-containing atmosphere. Like other epoxy coatings in white/whitish colour a yellowing may take place in cases of application under unfavourable weather conditions, especially sudden drops in temperature during drying and initial cure and/or lack of ventilation.

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.

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.



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Application onto zinc silicate or spray-metallized surfaces (thinning):
Curing agents:

It is recommended to apply HEMPADUR MASTIC 45880/45881 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. Curing agents 95880 and 95881 are hazy. This is intended and has no negative influence on the performance.

Note: **HEMPADUR MASTIC 45880/45881 is for professional use only.**

ISSUED BY: HEMPEL A/S - 4588012170C0011/4588112170C0008

This Product Data Sheet supersedes those previously issued.

For explanations, definitions and scope, see "Explanatory Notes" in the HEMPEL Book.

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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Product data are subject to change without notice and become void five years from the date of issue.