Product Data
HEMPADUR 45143

Cold climate application: 45143: BASE 45148: CURING AGENT 97430

Description:	HEMPADUR 45143 is a two-component, polyamide adduct cured epoxy paint with good wetting properties and low water permeability. It is selfpriming and forms a hard and tough coating which has good resistance against abrasion and impact as well as to seawater, mineral oils, aliphatic hydrocarbons and splashes from petrol and related products. Harmless to grain cargoes.
Recommended use:	1. As a high build primer, intermediate and/or finishing coat in (heavy duty) paint systems according to specification. (As a finishing coat where a cosmetic appearance is of less importance). 2. For repair and maintenance work at application temperatures above -10°C/15°F on hatch covers, decks, in cargo holds and ballast tanks etc. HEMPADUR 45143 is intended for use in cold/temperate climates, HEMPADUR 45141 for warmer climates - see APPLICATION CONDITIONS overleaf.
Service temperature:	Maximum, dry exposure only: 150°C/302°F Immersion service. Resists normal ambient temperatures at sea (Avoid long-term exposure to negative temperature gradients).
Certificates/Approvals:	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. Complies with EU Directive 2004/42/EC: subcategory j.
Availability:	Part of Group Assortment. Local availability subject to confirmation.

PHYSICAL CONSTANTS:

Shade nos/Colours:	50630*/ Red
Finish:	Semi-gloss
Volume solids, %:	60 ± 1
Theoretical spreading rate:	4 m^2/l [160.4 sq.ft./US gallon] - 150 micron/6 mils
Flash point:	25 °C [77 °F]
Specific gravity:	1.3 kg/litre [10.6 lbs/US gallon]
Surface-dry:	2 hour(s) 20°C/68°F
Through-dry:	4 hour(s) 20°C/68°F
Dry to touch:	11 (approx.) hour(s) 5°C/41°F
Fully cured:	20 day(s) 5°C/41°F
VOC content:	367 g/l [3 lbs/US gallon]
Shelf life:	3 years for BASE and 3 years (25°C/77°F) for CURING AGENT from time of production.

**other shades according to assortment list.*

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

APPLICATION DETAILS:

Version, mixed product:	**45143**
Mixing ratio:	BASE 45148: CURING AGENT 97430 3:1 by volume
Application method:	Airless spray / Brush
Thinner (max.vol.):	08450 (5%) / 08450 (5%)
Pot life (Airless spray):	2 hour(s) 15°C/59°F
Pot life (Brush):	4 hour(s) 15°C/59°F
Nozzle orifice:	0.019 - 0.023 "
Nozzle pressure:	250 bar [3625 psi] (Airless spray data are indicative and subject to adjustment)
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610 or HEMPEL'S THINNER 08450
Indicated film thickness, dry:	150 micron [6 mils] see REMARKS overleaf
Indicated film thickness, wet:	250 micron [10 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 and similar areas: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Abrasive blasting to minimum Sa 2½ (ISO 8501-1:2007) with a surface profile equivalent to Rugotest No. 3, min. N9a, Keane-Tator Comparator (G), 2 mils segments or ISO Comparator Medium (G). For temporary protection, if required, use a suitable shopprimer. All damage of shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to final painting. For repair and touch-up use: HEMPADUR 45143.
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 3 (ISO 8501-1:2007) (spot-repairs) or by abrasive blasting to min. Sa 2, preferably to Sa 2½ (ISO 8501-1:2007). Improved surface preparation will improve the performance. 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:

HEMPADUR 45143 is intended for curing conditions down to -10°C/14°F.Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. 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
4514350630	367 g/l	391 g/l	500 g/l

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

Colours/Colour stability:

Light shades will have a tendency to yellow when exposed to sunshine and darken when exposed to heat.

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.

Induction time:

If the paint temperature, as an exception, is below approx. 10°C/50°F, allow the mixture to pre-react 30 minutes before use.

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: 80-175 micron/3-7 mils

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 specification supersedes any guideline overcoat intervals indicated in the table.

Environment	Atmospheric, medium					
Surface temperature:	-10°C (14°F)		0°C (32°F)		20°C (68°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	36 h	Ext.	18 h	Ext.	4 h	Ext.
HEMPATEX	27 h	3 d	14 h	36 h	3 h	8 h
HEMPATHANE	36 h	90 d	18 h	45 d	4 h	10 d
Environment	Immersion					
HEMPADUR	54 h	90 d	27 h	90 d	6 h	30 d

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

Overcoating intervals:

Overcoating intervals related to later conditions of exposure: See separate APPLICATION INSTRUCTIONS
Before overcoating after exposure in contaminated environment, clean the surface thoroughly with high pressure fresh water hosing and allow drying. If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Note:

HEMPADUR 45143 For professional use only.

ISSUED BY:

HEMPEL A/S 4514350630