## Product Data HEMPADUR HI-BUILD 45200



45200: BASE 45209: CURING AGENT 95040

**Description:** HEMPADUR HI-BUILD 45200 is a two-component, high build epoxy paint. It forms a hard and tough

coating resistant to seawater, mineral oils and splashes from petrol and related products. Limited resistance to animal and vegetable oils and strong solvents such as ketones and esters. Not

recommended for acids, alkalies, or oxidizing solutions. Harmless to grain cargo.

**Recommended use:** As as intermediate or finishing coat designed for on-line application of containers.

As a sealer for metal-sprayed coatings or zinc silicate primers in epoxy systems.

Service temperature: Maximum, dry exposure only: 140°C/284°F see REMARKS overleaf

Certificates/Approvals: Tested according to section 175.300 of the Code of Federal Regulations Title 21 - Dry Foodstuff.

Consult Hempel for 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. Finish: Semi-flat Volume solids, %: 58 ± 1

Theoretical spreading rate: 7.3 m²/l [292.7 sq.ft./US gallon] - 80 micron/3.2 mils

Flash point: 26 °C [78.8 °F]

 Specific gravity:
 1.4 kg/litre [12.1 lbs/US gallon]

 Surface-dry:
 2 approx. hour(s) 20°C/68°F

 Dry to touch:
 5 - 7 hour(s) 20°C/68°F

 Fully cured:
 7 day(s) 20°C/68°F

 VOC content:
 418 g/l [3.5 lbs/US gallon]

Shelf life: 3 years for BASE and 3 years (25°C/77°F) for CURING AGENT from time of production.

\*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: 45200

Mixing ratio: BASE 45209: CURING AGENT 95040

3:1 by volume

Application method: Airless spray / Brush Thinner (max.vol.): 08450 (10%) / 08450 (10%)

For on-line container production thinning according to specification

Pot life (Airless spray): 5 hour(s) 20°C/68°F
Pot life (Brush): 8 hour(s) 20°C/68°F
Nozzle orifice: 0.018 - 0.021 "
Nozzle pressure: 250 bar [3625 psi]

(Airless spray data are indicative and subject to adjustment)

Cleaning of tools: HEMPEL'S TOOL CLEANER 99610

Indicated film thickness, dry: 80 micron [3.2 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.

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SURFACE PREPARATION:

New steel: 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 corresponding to Rugotest No. 3, N9a to N10, preferably BN9a to BN10, Keane-Tator Comparator, 2.0 G/S 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: specified HEMPADUR paint.

Repair and maintenance: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. When used as "tiecoat": Remove all rust and loose material by abrasive blasting or power tool cleaning. Dust off residues. Touch up bare spots to full film thickness

Sealer: When used as a sealer on metal-sprayed coatings or zinc silicate primers, the product should be diluted 10-15% with THINNER 08700, recommended dry film thickness: 40 micron. Application by "flash coat technique" may be necessary, but a "closed film" is to be obtained and the following coat should not be applied within the next 8 hours (20°C/68°F).

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: 10°C/50°F, preferably above 15°C/59°F. The temperature of the surface and that of the paint itself must also be above this limit.

In confined spaces provide adequate ventilation during application and drying.

PRECEDING COAT: None, or as per specification. Recommended systems are: HEMPADUR PRIMER 15300 or

HEMPADUR ZINC 15360.

SUBSEQUENT COAT:

None, or as per specification. Recommended systems are: HEMPATHANE

REMARKS:

VOC - EU Directive 2004/42/EC:

Product	As supplied	5 vol. % thinning	Limit phase II, 2010
4520012170	418 g/l	440 g/l	500 g/l

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

Colours/Colour stability:

Colour stability for some shades may be effected by exposure to harsh chemical atmospheres. This does not affect the performance of the coating.

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.

For certain colours extra coats may be necessary to obtain full opacity.

Weathering/service temperatures:

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: 60-90 micron / 2.4 -3.6 mils for use on containers. For other uses (contact Hempel) normal range is 100-125 micron/4-5 mils which is achieved by none or limited diluting at application.

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 (50°F)		20°C (68°F)		30°C (86°F)			
	Min	Max	Min	Max	Min	Max		
HEMPADUR	30 h	Ext.	12 h	Ext.	6 h	Ext.		
HEMPATEX	15 h	40 h	6 h	16 h	3 h	8 h		
HEMPATHANE	30 h	25 d	12 h	10 d	6 h	5 d		
Environment	Immersion							
HEMPADUR	40 h	75 d	16 h	30 d	8 h	15 d		

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

Overcoating intervals: According to specification.

HEMPADUR HI-BUILD 45200 For professional use only. Note:

ISSUED BY: HEMPEL A/S 4520012170

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 shee 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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