

## **HEMPADUR QUATTRO 17634**

17634: BASE 17636: CURING AGENT 97334

**Description:** HEMPADUR QUATTRO 17634 is a two-component universal epoxy paint, which cures to a hard and

tough coating with good resistance to abrasion, seawater and various oils.

Recommended use: As a universal epoxy and self-primed high performance coating system for atmospheric or in-water

service, including water ballast tanks and cargo oil tanks to be coated according to IMO-PSPC requirements (Resolutions MSC.215(82) and MSC.288(87)). HEMPADUR QUATTRO 17634 is intended for all year application down to -10°C/15°F and for in-shop applications where fast recoating

and handling is required.

**Features:** Excellent anticorrosive and very good mechanical properties.

Short drying time.

Curing down to -10°C/14°F.

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

Ballast water service. Resists normal ambient temperatures at sea (Avoid long-term exposure to

negative temperature gradients). Other liquids: Contact HEMPEL

Certificates/Approvals: PSPC type approved. (Consult HEMPEL for specific Type Approval Certificates)

Complies with Section 175.300 of the Code of Federal Regulations Title 21 - Dry Foodstuff. Consult

Hempel for details.

Tested for non-contamination of grain cargo at the Newcastle Occupational Health & Hygiene, Great

Britain.

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

PHYSICAL CONSTANTS:

Shade nos/Colours: 50630\*/ Red Finish: Semi-flat Volume solids, %:  $72 \pm 1$ 

Theoretical spreading rate: 5.8 m²/l [232.6 sq.ft./US gallon] - 125 micron/5 mils

Flash point: 27 °C [80.6 °F]

Specific gravity: 1.4 kg/litre [11.6 lbs/US gallon]
Dry to touch: 4 approx. hour(s) 20°C/68°F
9 (approx.) hour(s) 5°C/41°F

Fully cured: 7 day(s) 20°C/68°F 20 day(s) 5°C/41°F

VOC content: 276 g/l [2.3 lbs/US gallon]

\*ot content. 270 g/1 [2.3 ibs/03 gallon]

\*other shades according to assortment list.

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

APPLICATION DETAILS:

Application method:

Thinner (max.vol.): Pot life (Airless spray):

Pot life (Brush):

Version, mixed product: 17634

Mixing ratio: BASE 17636: CURING AGENT 97334 4:1 by volume

Airless spray / Brush 08450 (5%) / 08450 (5%) 2 hour(s) 20°C/68°F 2 hour(s) 20°C/68°F

Induction time: - see REMARKS overleaf
Nozzle orifice: 0.021 - 0.025 "
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:
Indicated film thickness, wet:
Indicated film thickness, wet:
Overcoat interval, min:
Overcoat interval, max:

125 micron [5 mils]
175 micron [7 mils]
see REMARKS overleaf
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.





## **HEMPADUR QUATTRO 17634**

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). Apply immediately after cleaning. All damage of shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to overcoating. For repair and touch-up use: HEMPADUR QUATTRO 17634.

Ballast tanks and cargo oil tanks: See separate APPLICATION INSTRUCTIONS Steel, 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 St 3 (minor areas) or by abrasive blasting to min. Sa 2, preferably to Sa 21/2. Improved surface preparation will improve the performance of the paint. 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 21/2 (immersion) (ISO 8501-4:2006). A flash-rust degree of maximum M (atmospheric exposure) / M, preferably L (immersion) (ISO 8501-4:2006) is acceptable before

blasting, alternatively dry abrasive blasting followed by high pressure fresh water hosing, drying, and finally, dry abrasive blasting again. Other substrates: contact Hempel.

APPLICATION CONDITIONS:

Use only where application and curing can proceed at temperatures above: -10°C/14°F. The temperature of the paint itself should be above: 15°C/59°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.

application. Feather edges to sound and intact paint. Dust off residues. Touch up to full film thickness. On pit-corroded surfaces, excessive amounts of salt residues may call for water jetting or wet abrasive

PRECEDING COAT:

None, or as per specification. When diluted to 25-30%, the product can be used as blast primer

preceding a full coat application of the product.

SUBSEQUENT COAT:

REMARKS:

According to specification.

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. Has a tendency to yellow after application. This has no influence on the performance nor does the yellowing affect any topcoat applied.

Induction time:

To facilitate proper application properties it is recommended to allow the thoroughly mixed BASE and CURING AGENT to prereact before application at temperatures below: 15°C/59°F.

Pot life of mixed paint:

3 hours - 15°C/59°F, 2 hours - 20°C/68°F, 1.5 hour - 25°C/77°F, 1 hour - 30°C/86°F

The viscosity can be too high for airless spray application below: 15°C/59°F. Temperatures above 30°C/86°F should preferably be avoided.

Film thicknesses/thinning:

In case two-component spray-equipment is used consult separate APPLICATION INSTRUCTIONS. 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: 100-200 micron/4-8 mils. For ballast tanks and cargo oil tanks at newbuilding stage minimum specified dft is:2 x 160 micron. (Consult the separate APPLICATION INSTRUCTIONS)

Shades:

Among the standard shades in the assortment, there are shades available containing aluminium; such as shade nos. 23420, 23450, 15740 and 57530.

Overcoating:

Note:

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 ISO 12944/2 C3					
Surface temperature:	-10°C (14°F)		0°C (32°F)		20°C (68°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	18 h	90 d	9 h	90 d	2 h	30 d
HEMPATEX	18 h	72 h	9 h	36 h	2 h	8 h
HEMPATHANE	18 h	90 d	9 h	90 d	2 h	20 d
Environment	Immersion ISO 12944/2 Im2					
HEMPADUR	36 h	90 d	18 h	90 d	4 h	30 d

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





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ISSUED BY:

HEMPEL A/S 1763450630

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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