



HEMPADUR QUATTRO 17634

BASE 17636 with 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 to be coated according to IMO-PSPC requirements (Resolution MSC.215(82)). 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 temperatures: Dry exposure only: Maximum 120°C/248°F
Ballast water service: Resists normal ambient temperatures at sea*
Other water service: 40°C/104°F (no temperature gradient)
Other liquids: Contact HEMPEL
*Avoid long-term exposure to negative temperature gradients.

Certificates/Approvals: PSPC type approved. (Consult Hempel for specific Type Approval Certificates)
Complies with EU Directive 2004/42/EC, subcategory j (see REMARKS overleaf).
HEMPADUR QUATTRO 17634 has been tested for non-contamination of grain cargo at the Newcastle Occupational Health, Great Britain.

Availability: Part of Group Assortment. Local availability subject to confirmation.
HEMPADUR QUATTRO 17634 replaces HEMPADUR 17630/17633 and HEMPADUR 45141/45143.

PHYSICAL CONSTANTS:

Colours/Shade nos: Red/50630*
Finish: Semi-flat
Volume solids, %: 72 ± 1
Theoretical spreading rate: 5.8 m²/litre - 125 micron
231 sq.ft./US gallon - 5 mils
Flash point: 27°C/81°F
Specific gravity: 1.4 kg/litre - 11.5 lbs/US gallon
Dry to touch: 4 hours at 20°C/68°F
9 hours (app.) at 5°C/41°F
7 days at 20°C/68°F
20 days at 5°C/41°F
Fully cured: 275 g/litre - 2.3 lbs/US gallon
VOC: 275 g/litre - 2.3 lbs/US gallon
*other shades according to assortment list. See REMARKS overleaf
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:

Mixing ratio: Base 17636 : Curing agent 97334
4 : 1 parts by volume
Application method: Airless spray Brush
Thinner (max.vol.): 08450 (5%) 08450 (5%)
Pot life: Airless spray: 2 hour (20°C/68°F) Brush 2 hours (20°C/68°F)
Induction time: See REMARKS overleaf
Nozzle orifice: .021"-.025"
Nozzle pressure: 250 bar/3600 psi
(Airless spray data are indicative and subject to adjustment)
HEMPEL'S TOOL CLEANER 99610
Cleaning of tools:
Indicated film thickness, dry: 125 micron/5 mils
Indicated film thickness, wet: 175 micron/7 mils
Recoat interval, min: 4 hours (20°C/68°F)
12 hours (5°C/41°F)
Recoat interval, max: See 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: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Abrasive blasting to Sa 2½. 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 QUATTRO 17634.

Ballast tanks: For PSPC type approved coating, consult separate APPLICATION INSTRUCTIONS - BALLAST TANKS for HEMPADUR QUATTRO 17634.

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 St 3 (minor areas) or by abrasive blasting to min. Sa 2, preferably to Sa 2½. Improved surface preparation will improve the performance of HEMPADUR QUATTRO 17634.

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). A flash-rust degree of maximum M (atmospheric exposure), preferably L (immersion) (ISO 8501-4:2006) is acceptable before 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 blasting, alternatively dry abrasive blasting followed by high pressure fresh water hosing, drying, and finally, dry abrasive blasting again.

Other substrates: Contact Hempel.

APPLICATION

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

SUBSEQUENT COAT:

According to specification.

REMARKS:

VOC - EU directive

2004/42/EC:

VOC:

	As supplied	5 vol. % thinning	Limit phase II, 2010
VOC in g/l	275	302	500

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

Shades:

HEMPADUR QUATTRO 17634 also comes in colours: Black/19990, Green/40640, Light olive green 49980, Light red 50900 and MIO grey/red.

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. HEMPADUR QUATTRO 17634 has a tendency to yellow after application. This has no influence on the performance nor does the yellowing effect any topcoat applied.

Film thicknesses:

May be specified in other film thicknesses 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 at newbuilding stage the minimum specified dft is 2 x 160 micron. Please consult separate APPLICATION INSTRUCTIONS - BALLAST TANKS for HEMPADUR QUATTRO 17634.

Curing agent:

Mixing/

Induction time:

Curing agent 97334 is hazy. This is intended and has no influence on the performance. In order to facilitate proper application properties it is recommended to allow the thoroughly mixed BASE and CURING AGENT to pre-react before application at temperatures below 15°C/59°F

Temperature of mixed paint	15°C/59°F ¹⁾	20°C/68°F	25°C/77°F	30°C/86°F ²⁾
Pot life	3 hours	2 hours	1½ hours	1 hour

1) At 15°C/59°F and below, the viscosity can be too high for airless spray application.

2) Temperatures above 30°C/86°F should preferably be avoided.

In case two-component spray-equipment is used consult separate APPLICATION INSTRUCTIONS.

Note:

HEMPADUR QUATTRO 17634 is for professional use only.

ISSUED BY:

HEMPEL A/S - 1763450630CR002

This Product Data Sheet supersedes those previously issued.

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

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