



HEMPADUR UNIQ 47741 / HEMPADUR UNIQ 47743

Warm climate application: 47741: BASE 47745: CURING AGENT 98741
Cold climate application: 47743: BASE 47747: CURING AGENT 98743

Description:	HEMPADUR UNIQ 47741/47743 is a self-priming, two component, high build, pure epoxy paint, polyamide/amine cured. Abrasion and corrosion resistant.	
Recommended use:	As a universal primer or selfprimed high performance coating system for atmospheric or in-water service. It provides the possibility of reducing the number of primers for new-building. HEMPADUR UNIQ 47741 is intended for use in warm climates above 15°C/50°F. HEMPADUR UNIQ 47743 is intended for use in cold climates down to -10°C/14°F. Red or grey aluminium shades (59690 or 19690) can advantageously be used as first coat.	
Features:	High class ballast tank coating. Heavy duty, abrasion resistant coating. Overcoatable by a wide range of epoxy- and polyurethane coatings. Low VOC. Applicable by standard heavy duty airless spray equipment in a wide film thickness range.	
Service temperature:	Maximum, dry exposure only: 140°C/284°F Ballast water service. Resists normal ambient temperatures at sea (Avoid long-term exposure to negative temperature gradients). Other water service: 50°C/122°F (no temperature gradient) Other liquids. Contact HEMPEL	
Certificates/Approvals:	PSPC type approved. (Consult HEMPEL for specific Type Approval Certificates) 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:		
Version, mixed product:	47741	47743
Shade nos/Colours:	22090* / Cream	22090* / Cream
Finish:	Semi-gloss	Semi-gloss
Volume solids, %:	80 ± 1	80 ± 1
Theoretical spreading rate:	5.3 m ² /l [212.5 sq.ft./US gallon] - 150 micron/6 mils	5.3 m ² /l [212.5 sq.ft./US gallon] - 150 micron/6 mils
Flash point:	29 °C [84.2 °F]	29 °C [84.2 °F]
Specific gravity:	1.6 kg/litre [13.1 lbs/US gallon]	1.6 kg/litre [13.4 lbs/US gallon]
Dry to touch:	6 hour(s) 20°C/68°F	10 to 12 hour(s) at 5°C/41°F
Fully cured:	7 day(s) 20°C/68°F	21 day(s) at 5°C/41°F
VOC content:	221 g/l [1.8 lbs/US gallon]	220 g/l [1.8 lbs/US gallon]
	<i>*other shades according to assortment list.</i>	
	<i>The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.</i>	
APPLICATION DETAILS:		
Version, mixed product:	47741	47743
Mixing ratio:	BASE 47745: CURING AGENT 98741 3:1 by volume	BASE 47747: CURING AGENT 98743 3:1 by volume
Application method:	Airless spray	Airless spray
Thinner (max.vol.):	08450	08450
Pot life:	1 hour(s) 20°C/68°F	1 hour(s) 20°C/68°F
Nozzle orifice:	see REMARKS overleaf	
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610	
Indicated film thickness, dry:	150 micron [6 mils]	
Indicated film thickness, wet:	200 micron [8 mils]	
Recoat interval, min:	According to separate APPLICATION INSTRUCTIONS	According to separate APPLICATION INSTRUCTIONS
Recoat interval, max:	According to separate APPLICATION INSTRUCTIONS	According to separate APPLICATION INSTRUCTIONS
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). Apply immediately after cleaning. All damage of shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to overcoating.

For areas not later to be subject to aggressive exposure surface preparation to be as per normal shipyard procedure.

Ballast tanks: For PSPC type approved coating, consult separate APPLICATION INSTRUCTIONS

Stainless steel: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Ballast tanks of chemical carriers to be abrasive blast cleaned to a uniform, sharp, dense profile (Rugotest No. 3, BN9a, ISO Comparator Medium (G), Keane-Tator Comparator 2.0 G/S) corresponding to Rz minimum 50 micron.

Repair and maintenance: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Welds, burn damage or other areas showing local corrosion to be power tool cleaned to minimum St 3 achieving a uniform, distinct surface profile. Surface preparation is improved by abrasive blast cleaning to Sa 2, preferably Sa 2½. 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) / M, preferably L (immersion) (ISO 8501-4:2006) is acceptable before application. Feather edges to sound and intact areas. Dust off residues. Touch up to full film thickness.

APPLICATION CONDITIONS:

HEMPADUR UNIQ 47741: Use only where application and curing can proceed at temperatures above: 15°C/59°F. Maximum relative humidity: 85%. If drying and curing conditions are expected to take place below 10°C/50°F or at higher relative humidity, use: HEMPADUR UNIQ 47743.

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. The temperature of the paint itself should be: 15-25°C/59-77°F. At temperatures below 15°C/59°F mix the components thoroughly and allow the mixture to pre-react before use.

PRECEDING COAT

None, or as per specification.

SUBSEQUENT COAT:

None, or as per specification. Recommended systems are: HEMPADUR or HEMPATANE

REMARKS:

Colours/Colour stability:

The curing agent 98750 has a tendency to become darker at storage. This has no influence on performance, but may influence the shade of the mixed product.

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.

Application equipment:

Spray equipment: It is recommended to use heavy-duty airless spray equipment with a pump transmission rate of 60:1 (approximately), and a theoretical output of min. 12 litres per minute. Longer spray hoses and/or bigger spray nozzles will require higher capacity of the spray equipment to maintain a proper spray fan atomisation. Optimum result with undiluted paint material is obtained with an output pressure of 250 bar/3600 psi and nozzle orifices of 0.021"-0.023". Bigger nozzle-sizes are possible, but depends on the skill of the painter, sufficient output pressure and material-flow. Furthermore up to 5% thinner may be needed.

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 micron/5 mils. Undiluted, absolute minimum for closed film formation is 100 micron dry film thickness. For the upper end the paint material has sufficient safety in its "application window" to allow for a 250 micron specification provided a skilled application work.

Shades:

Other shades are available according to assortment list. The aluminium pigmented version, shade no. 59690, red aluminum and shade no.19690, grey aluminum, are designed for primer-coat application, holds a lower volume solids (72%) and a slightly higher VOC (270 g/litre - 2.3 lbs/US gallon) than the other shades. The aluminium pigmented versions contain approximately 9% aluminium by weight in the dry film.

Recoating intervals:

When changing between summer- and winter-version, drying time and recoating intervals will change as described separately.

Note:

HEMPADUR UNIQ 47741 47743 For professional use only.

ISSUED BY:

HEMPEL A/S

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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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