

# HEMPADUR® MULTI-STRENGTH® 45750

CURING AGENT 97650

<b>Description:</b>	HEMPADUR MULTI-STRENGTH 45750 is a self-priming, two-component, high-build, polyamide/amine cured epoxy paint which cures to an abrasion resistant coating with good resistance to seawater. Applicable by standard heavy duty airless spray equipment. Minimum curing temperature 10°C/50°F.
<b>Recommended use:</b>	As a heavy duty coating for areas exposed to abrasion such as ramps, ship hulls and holds of bulk carriers. As a ballast tank coating for special purposes such as chemical carriers carrying hot cargoes. As a finishing coat where a cosmetic appearance is of less importance.
<b>Service temperatures:</b> maximum:	Dry: 140°C/284°F In water (maximum temperature gradient 10°C/18°F): 50°C/140°F See REMARKS overleaf.
<b>Approvals, certificates:</b>	Tested for non-contamination of grain cargo at the Newcastle Occupational Health Agency, Great Britain. Accepted by Lloyd's Register of Shipping as a provisionally recognized corrosion control coating. After testing at Marintek, a subsidiary of Sintef in Norway, the system: 2 coats of HEMPADUR MULTI-STRENGTH 45750, was given the highest classification, B1.
<b>Availability:</b>	Subject to confirmation.

## PHYSICAL CONSTANTS:

Colours/Shade nos:	Grey/12340 - Red/50630
Finish:	Semi-gloss
Volume solids:	81%
Theoretical spreading rate:	4.1 m <sup>2</sup> /litre - 200 micron 162 sq.ft./US gallon - 8 mils
Flash point:	27°C/81°F
Specific gravity:	1.6 kg/litre - 13.4 lbs/US gallon
Surface dry:	7-8 hours at 20°C/68°F
Fully cured:	7 (approx.) days at 20°C/68°F
V.O.C.:	205 g/litre - 1.7 lbs/US gallon

*The physical constants are subject to normal manufacturing tolerances.  
Further reference is made to "Explanatory Notes" in the Hempel Book.*

## APPLICATION DETAILS:

Mixing ratio for 45750:	Base 45759 : Curing agent 97650 4 : 1 by volume
Application method:	Airless spray      Brush (touch-up)
Thinner (max.vol.):	08450 (2%)      08450 (2%)
Pot life:	1 hour (20°C/68°F)
Nozzle orifice:	.023"-.027"
Nozzle pressure:	250 bar/3600 psi <i>(Airless spray data are indicative and subject to adjustment)</i>
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610 or THINNER 08460
Indicated film thickness, dry:	200 micron/8 mils
Indicated film thickness, wet:	250 micron/10 mils
Recoat interval, min:	See REMARKS overleaf
Recoat interval, max:	See REMARKS overleaf

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SURFACE PREPARATION:	<p><b>New steel, "heavy duty use":</b> Abrasive blasting to min. Sa 2½. Grit surface profile, Rz minimum 100 micron - maximum 150 micron, corresponding to ISO Comparator Coarse (G). Oil and grease must be removed with suitable detergent, salts and other contaminants by (high pressure) fresh water hosing prior to blasting. After blasting, clean the surface carefully from abrasive and dust.</p> <p><b>New steel, ballast tanks and similar areas:</b> Abrasive blasting to Sa 2½. For temporary protection, if required, use a suitable shopprimer. Damage of shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to final painting. The best performance will be obtained by abrasive spot-blasting and abrasive sweep blasting of the intact shopprimer. For repair and touch-up use HEMPADUR MULTI-STRENGTH 45750.</p> <p><b>Stainless steel:</b> (Ballast tanks in chemical carriers) to be abrasive blasted to a uniform, sharp, dense profile, ISO Comparator Medium (G), corresponding to Rz minimum 50 micron. Any salts, grease, oil, etc. to be removed before abrasive blasting is commenced.</p> <p><b>Repair and maintenance:</b> Remove oil and grease etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Clean damaged areas thoroughly by abrasive blasting or power tool cleaning (minor areas only). Feather edges to sound intact areas. Dust off residues. Touch-up to full film thickness.</p> <p><b>On old ship bottoms</b> and similar pit corroded surfaces, excessive amounts of salt residues may call for dry abrasive blasting, high pressure fresh water hosing, drying, and finally, dry abrasive blasting again. Alternatively, hydro-jetting may be used provided the steel surface has already the surface profile as described above: New steel, "heavy duty use".</p>														
APPLICATION CONDITIONS:	<p>Use only where application and curing can proceed at temperatures above 10°C/50°F. The temperature of the paint itself should be above 15°C/59°F, preferably above 20°C/68°F for proper application. Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. Relative humidity max. 90%.</p> <p>In confined spaces provide adequate ventilation during application and drying.</p>														
PRECEDING COAT:	None, HEMPADUR 15590 or according to specification.														
SUBSEQUENT COAT:	None, or as per specification, depending on area of use.														
REMARKS:															
Weathering:	A tendency to chalk in outdoor exposure does not detract from the protective properties.														
Service temperatures:	Even though the service temperature is kept below the specified maximum, it should be noted that the higher the temperature, the more sensitive the paint will be to mechanical and/or chemical exposure. Combined thermal/mechanical and/or chemical exposure may therefore increase the risk of damage.														
Film thicknesses:	<p>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 150-200 micron/6-8 mils.</p> <p>It is recommended to use heavy airless spray equipment with a pump transmission rate of 60:1 (approximately), and a theoretical output of min. 12 litres per minute.</p>														
Recoating:	<p>At 20°C/68°F surface temperature and good ventilation the following recoating intervals apply: (200 micron/8 mils dry film thickness of HEMPADUR MULTI-STRENGTH 45750)</p> <table><tr><td></td><td><b>minimum</b></td><td><b>maximum</b></td></tr><tr><td>HEMPADUR:</td><td>6 hours</td><td>30 days</td></tr><tr><td>HEMPATHANE:</td><td>6 hours</td><td>1 day*</td></tr><tr><td>HEMPANYL TAR 16280:</td><td>8 hours</td><td>16 hours</td></tr></table> <p>*Optimal adhesion is obtained when HEMPADUR MULTI-STRENGTH 45750 is recoated while still tacky.</p> <p>The long maximum recoating interval for HEMPADUR will be reduced if the coating is more than just scarcely exposed to direct sunshine before recoating.</p> <p>If the interval is exceeded, roughening of surface is necessary to ensure intercoat adhesion.</p> <p>Do not store at temperatures above 45°C/113°F.</p> <p>Normally not to be diluted, but exceptionally 1-2% HEMPEL'S THINNER 08450 may be used.</p>				<b>minimum</b>	<b>maximum</b>	HEMPADUR:	6 hours	30 days	HEMPATHANE:	6 hours	1 day*	HEMPANYL TAR 16280:	8 hours	16 hours
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Note:	<b>HEMPADUR 45750 is for professional use only.</b>														
SAFETY:	<p>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. Harmful or fatal if swallowed; immediately seek medical assistance if swallowed. Avoid inhalation of possible solvent vapours or paint mist, as well as paint contact with skin and eyes. Apply only in well ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.</p>														

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Product data are subject to change without notice and become void five years from the date of issue.

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