

HEMPADUR* 15100

CURING AGENT 95100

Description: HEMPADUR 1510 is a two-component, amine-adduct cured high build coal tar epoxy. It has excellent resistance to wear and impact as well as to sea water, waste water, fuel oil and to aliphatic solvents and it resists spillage of mineral acids and aromatic hydrocarbon solvents. It has a higher resistance to temperatures and temperature gradients than polyamide cured coal tar epoxies.

Recommended use: HEMPADUR 1510 is recommended for long time corrosion protection of structural steel and concrete in severe corrosive and immersed environments. Typical areas are steel buried in aggressive soil, pipelines of steel and concrete, tanks containing fuel or lubrication oil, drill water, drill mud, warm water (see below) or steel and concrete in sewage treatment plants.

Service temperatures: Dry: In water (maximum temperature gradient 35°C/63°F):
maximum: 100°C/212°F 90°C/194°F

Approvals, certificates: Accepted by Lloyd's Register of Shipping as a provisionally recognized corrosion control coating. Conforms with Steel International, Dep.Spec. Aramco, Stock No. 09-612-320.

Availability: Subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos:	Black/19990	Brown/60420
Finish:	Semi-gloss	Semi-gloss
Volume Solids:	57%	57%
Theoretical spreading rate:	2.9 m ² /litre - 200 micron 114 sq.ft./US gallon - 8 mils	2.9 m ² /litre - 200 micron 114 sq.ft./US gallon - 8 mils
Flash point:	13°C/56°F	13°C/56°F
Specific gravity:	1.3 kg/litre - 10.8 lbs/US gallon	1.4 kg/litre - 11.4 lbs/US gallon
Surface dry:	4 (approx.) hrs at 20°C/68°F (ISO 1517)	4 (approx.) hrs at 20°C/68°F (ISO 1517)
Dry to touch:	6 (approx.) hours at 20°C/68°F	6 (approx.) hours at 20°C/68°F
Fully cured:	7 days at 20°C/68°F	7 days at 20°C/68°F
V.O.C.:	388 g/litre - 3.2 lbs/US gallon	388 - 3.2 lbs US gallon

Shelf life: 1 year from time of production. Depending on storage conditions, mechanical stirring may be necessary before usage.

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 15100:	Base 15109 : Curing agent 95100 4 : 1 by volume	
Application method:	Airless spray	Brush
Thinner (max.vol.):	0845 (5%)	0845 (5%)
Pot life:	2 hours (20°C/68°F)	6 hours (20°C/68°F)
Nozzle orifice:	.023"	
Nozzle pressure:	200 bar/2900 psi (Airless spray data are indicative and subject to adjustment)	
Cleaning of tools:	HEMPEL'S TOOL CLEANER 9961	
Indicated film thickness, dry:	200 micron/8 mils	
Indicated film thickness, wet:	350 micron/14 mils	
Recoat interval, min:	See REMARKS overleaf	
Recoat interval, max:	See REMARKS overleaf	

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2. HEMPADUR 15100

SURFACE	New steel: Abrasive blasting to Sa 2½ (ISO 8501-1: 1988), SSPC-SP 10. For temporary protection
PREPARATION:	a suitable shopprimer may be used. 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 1510. If system is to be exposed to chemicals use only zinc-free shopprimer. Abrasive blast sweeping of shopprimer is recommended before coating with HEMPADUR 1510. Concrete: Remove slip agent and other possible contaminants by emulsion washing followed by high pressure hosing with fresh water. Remove scum layer and loose matter to a hard, rough and uniform surface, preferably by abrasive blasting, possibly by other mechanical treatment or acid etching. Seal surface with suitable sealer, e.g. HEMPADUR SEALER 0597 (furthermore, please see Product Data Sheet for 0597). 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 abrasive blasting or power tool cleaning. Feather edges to sound and intact areas. Dust off residues. Touch up to full film thickness.
APPLICATION CONDITIONS:	Use only where application and curing can proceed at temperatures above 10°C/50°F. The temperature of the surface and that of the paint itself must also be above this limit. 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.
PRECEDING COAT:	Steel: None, HEMPADUR 1559 or according to specification. Concrete: HEMPADUR SEALER 0597.
SUBSEQUENT COAT:	None.
REMARKS:	
Film thicknesses:	May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence amount of thinning necessary, drying time and recoating interval. Normal range is 125-200 micron/5-8 mils.
Recoating:	Recoating intervals related to later conditions of exposure: (200 micron/8 mils dry film thickness of HEMPADUR 1510)

	Minimum		Maximum	
Surface temperature	20°C/68°F		20°C/60°F	
Recoated with (quality numbers only)	Atmospheric Severe	Water immersion	Atmospheric Severe	Water immersion
1510	6 hours	6 hours	36 hours*	36 hours*

*The maximum recoating interval between the layers of HEMPADUR 1510 can be prolonged to 4 days at 20°C/68°F **on the condition that the coating has not been exposed to sunlight, water/condensation or to (other) contamination before recoating. Furthermore, the surface of the first coat of HEMPADUR 1510 must be free of any exudations.** This is secured by keeping the conditions of application, drying and curing, ie such as ventilation, temperature, film thickness and thinning within the described limits. Note that excessive temperature during application/curing also must be avoided.

If the maximum recoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Note: **HEMPADUR 1510 is for professional use only.**

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. 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.

This Product Data Sheet supersedes those previously issued. For definition and scope, see explanatory notes to applicable Product Data Sheets. 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. The Products are supplied and all technical assistance is given subject to HEMPEL's GENERAL CONDITIONS OF SALES, DELIVERY AND SERVICE, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said GENERAL CONDITIONS for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise.

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

Issued by HEMPEL'S MARINE PAINTS A/S.

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