

HEMPADUR* LTC 15030

CURING AGENT 97030

Description: HEMPADUR LTC 1503 is a low temperature curing (LTC), two-component, polyamide adduct cured coal tar epoxy, which cures to a hardwearing coating, highly resistant to sea water, crude oil, fuel oil, etc. Not resistant to aromatic hydrocarbons, including some grades of petrol, or stronger solvents. Aliphatic hydrocarbons will discolour.

Recommended use: For long-term protection of steel and concrete in severe corrosive environments and immersed areas, e.g. on submerged surfaces, in crude and fuel oil tanks, and water tanks, when the application temperatures are below approx. 10°C/50°F.

Service temperatures:
Maximum: Dry: 90°C/194°F In oil: 60°C/140°F In water (no temperature gradient): 45°C/113°F

Approvals, certificates: Approved as a low flame spread material by Japanese authorities.
Tested for non-contamination of grain cargo at the Newcastle Occupational Health Agency, Great Britain.
Accepted by Lloyd's Register of Shipping and Bureau Veritas as a corrosion control coating.

Availability: Subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos.:	Black/19990	Brown/60430
Finish:	Semi-gloss	Semi-gloss
Volume solids:	63%	63%
Theoretical spreading rate:	5.0 m ² /litre - 125 micron 202 sq.ft./US gallon - 5 mils	5.0 m ² /litre - 125 micron 202 sq.ft./US gallon - 5 mils
Flash point:	25°C/77°F	25°C/77°F
Specific gravity:	1.3 kg/litre - 10.8 lbs/US gallon	1.4 kg/litre - 11.7 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)

	-10°C/14°F	0°C/32°F	+10°C/50°F
Dry to touch:	60 hrs	24 hrs	12 hrs
Fully cured:	65 days	30 days	15 days

V.O.C.: 350 g/litre - 2.9 lbs/US gallon 346 g/litre - 2.9 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 15030: Base 15039 : Curing agent 97030
3 : 1 by volume

Application method:	Airless spray	Air spray	Brush (touch-up)
Thinner (max.vol.):	0845 (5%)	0845 (10%)	0845 (5%)
Pot life:	2 hours (10°C/50°F)		4 hours (10°C/50°F)
Nozzle orifice:	.021"-.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:	125 micron/5 mils (See REMARKS overleaf)		
Indicated film thickness, wet:	200 micron/8 mils		
Recoat interval, min:	See REMARKS overleaf		
Recoat interval, max:	See REMARKS overleaf		

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SURFACE PREPARATION:	<p>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, SSPC-SP-10. For temporary protection, if required, use 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 LTC 1503.</p> <p>Concrete: Remove slip agent and other possible contaminants by emulsion washing followed by (high pressure) fresh water hosing. 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, see the Product Data Sheet for 0597).</p> <p>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. As an alternative to dry cleaning, water jetting to min. WJ-3, preferably WJ-2 (NACE No. 5/SSPC-SP 12), may be used. A flash-rust degree of maximum FR-2 (Hempel standard) is acceptable before application. Feather edges to sound and intact areas. Dust off residues. Touch up to full film thickness.</p>
APPLICATION CONDITIONS:	<p>Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. HEMPADUR LTC 1503 may be applied and will cure at temperatures down to -10°C/15°F. The temperature of the paint itself should preferably be above 10°C/50°F. If the temperature of the paint is below 10°C/50°F thinning may be necessary, but this will cause lower film build and slower drying. In confined spaces provide adequate ventilation during application and drying.</p>
PRECEDING COAT:	<p>Steel: None or according to specification.</p> <p>Concrete: HEMPADUR SEALER 0597.</p>
SUBSEQUENT COAT:	None or as per specification depending on area of use.
REMARKS:	
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 the amount of thinning necessary, drying time and recoating interval. Normal range is 100-125 micron/4-5 mils.</p>
Recoating:	

125 micron/5 mils of 1503 Recoated with (Quality numbers only)	Minimum			Maximum		
	-10°C/14°F	0°C/32°F	+10°C/50°F	-10°C/14°F	0°C/32°F	+10°C/50°F
1503	60 hours	24 hours	12 hours	20 days	9 days	4½ days
1628	60 hours	24 hours	12 hours	4½ days	48 hours	24 hours
1630	50 hours	20 hours	10 hours	3½ days	36 hours	18 hours

The best time for recoating is when the paint film is still slightly tacky. The maximum recoating intervals between layers of HEMPADUR LTC 1503 can be doubled on the condition that the coating has not been exposed to sunlight, to water/condensation, or to (other) contamination before recoating. Furthermore the surface of the first layer of HEMPADUR LTC 1503 must be free of any exudations. This is secured by keeping the conditions of application, drying and curing, i.e. such as ventilation, temperature, filmthickness and thinning within the above described limits. Note that excessive temperatures also must be avoided. If the maximum interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Note: Do not put tanks into use before the coating is properly cured. Bleeding may occur into subsequent coat. The effect is cosmetic only and has no negative influence on neither the anticorrosive nor any antifouling properties of the final paint system.

HEMPADUR LTC 1503 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.

*This is a corporate trademark of the Hempel Group.
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