



HEMPADUR 85671

85671 : BASE 85675 : CURING AGENT 97371

Description:	HEMPADUR 85671 is a two-component, amine adduct cured phenolic epoxy (novolac) coating with very good adhesion and high temperature, water and chemical resistance.
Recommended use:	As an interior lining in tanks, pipelines etc. for hot water, brine, crude oil, etc. For coating of potable water tanks. As a primer coat in specific painting systems.
Service temperature:	Minimum: -196°C/-320°F ; Maximum: 205°C/401°F. For design temperatures above 160°C/320°F dry, see remarks on film thickness overleaf. In water (maximum gradient 15°C/27°F): 95°C/203°F
Certificates/Approvals:	In accordance with ARAMCO's specification APCS 2A, 2B and 2C. Conforms to Norsok M-501, system no. 3. Approved by Water Research Centre (WRAS), Great Britain, for potable water up to 23°C/73°F. Complies with Section 175.300 of the Code of Federal Regulations Title 21 – Liquid and Dry Foodstuff. Consult Hempel for details.
Availability:	Part of Group Assortment. Local availability subject to confirmation.
PHYSICAL CONSTANTS:	
Shade nos/Colours:	11150* / Light grey
Finish:	Flat
Volume solids, %:	68 ± 1
Theoretical spreading rate:	6.8 m ² /l [272.7 sq.ft./US gallon] to 100 micron/4 mils
Flash point:	25 °C [77 °F]
Specific gravity:	1.7 kg/litre [13.9 lbs/US gallon]
Surface dry:	2 to 3 hour(s) 20°C/68°F
Dry to touch:	4 to 6 hour(s) 20°C/68°F
Fully cured:	10 day(s) 20°C/68°F
VOC content:	316 g/l [2.6 lbs/US gallon]
Shelf life:	1 Year (20°C/68°F) from time of production. Shelf life is reduced at storage temperatures above 20°C/68°F. <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:	85671
Mixing ratio:	BASE 85675 : CURING AGENT 97371 8.8 : 1.2 by volume 13.8 : 1.0 by weight
Application method:	Airless spray / Brush (touch up)
Thinner (max.vol.):	HEMPEL'S THINNER 08450 (Consult the separate APPLICATION INSTRUCTIONS)
Pot life:	3 hour(s) 20°C/68°F
Induction time:	15 minute(s) 20°C/68°F see REMARKS overleaf
Nozzle orifice:	0.018 to 0.021 "
Nozzle pressure:	200 bar [2900 psi] (Airless spray data are indicative and subject to adjustment)
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610
Indicated film thickness, dry:	100 micron [4 mils] see REMARKS overleaf
Indicated film thickness, wet:	150 micron [6 mils]
Overcoat interval, min:	According to separate APPLICATION INSTRUCTIONS
Overcoat interval, max:	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 near white metal Sa 2½ (ISO 8501-1:2007) with a surface profile corresponding to Rugotest No. 3, BN10a, Keane-Tator Comparator 3.0 G/S, or ISO Comparator Medium (G). Other degrees of cleaning including wet methods like ultra-high-pressure-water-jetting (UHPWJ) and blasting with mixtures of grit and water may be relevant according to Hempel-specification. Apply immediately after cleaning.

Repair and maintenance: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Old steel surfaces having been exposed to salt water, excessive amounts of salt residues in pittings may call for abrasive blasting, high pressure fresh water hosing, drying, and finally, dry abrasive blasting again.

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, as per relevant painting specification.

APPLICATION CONDITIONS:

Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. Use only where application and curing can proceed at temperatures above: 10°C/50°F. The temperature of paint itself should be 15°C/59°F or above. In-can temperature of the paint should preferably be below 25°C/77°F. Curing requires a relative humidity of: max 80%, preferably 40-60%. In closed spaces provide adequate ventilation during application and drying. Reference is made to separate APPLICATION INSTRUCTIONS.

REMARKS:

Induction time:

The thoroughly mixed BASE and CURING AGENT must be prereacted before application (15 minutes at 20°C/68°F), at other temperatures, please see APPLICATION INSTRUCTIONS.

Application(s):

May be used under insulation, pipes and the like in one or two-coat systems. Dry film thicknesses should not exceed: 300 micron/12 mils. May be specified in another film thickness than indicated depending on purpose and area of use

Film formation of each coat has to be of good quality, free from defects such as pinholes and without any dry spray.

Exudation of the curing agent causes the mentioned patchy, whitish, and/or greasy formation, which will take place if the product is applied at low temperatures without proper induction time and/or if the coating is exposed to water (rain, condensation) during drying and curing.

Film thicknesses/thinning:

The minimum total dry film thickness for the system is normally: 300 micron/12 mils

The coating should be cured for at least 7 days at 20°C/68°F before exposure to high temperatures. At temperatures above 160°C/320°F, max 205°C/401°F, it is recommended to apply maximum: 2 x 100 micron/4 mils. The coating will discolour at high service temperatures. Keep thinning at absolute minimum. Do not dilute the components separately - only the mixture.

Overcoating note:

The coating is to be applied in a dry film thickness as near as possible to the specified: 100 micron/4 mils

Drying and curing conditions have to be according to APPLICATION CONDITIONS until full curing has been obtained.

The surface MUST be completely clean before overcoating. All dust, abrasives and loose dry spray must be removed by vacuum cleaning. Dry spray should be removed by light abrading. The coating may only be exposed to strong direct sunlight or ultraviolet light under exceptional circumstances and then only for short periods.

The coating is to be checked carefully and should have no patchy, whitish, and/or greasy formation, which can hinder adhesion of the subsequent coat.

Overcoating intervals:

Minimum:

Non-potable water service: 36 hours (20°C/68°F) between the first and second coat, 24 hours (20°C/68°F) between the second and third coat.

Potable water service: 3 days (20°C/68°F) between coats.

The approval from Folkehelseinstituttet, Norway will apply provided a minimum recoat interval of 6 days (20°C/68°F).

Maximum: 21 days (20°C/68°F).

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

Note:

HEMPADUR 85671 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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