



HEMPAXANE CLASSIC 55000

APPLICATION AND CURING CONDITIONS: The surface must be completely clean and dry at the time of application, and its temperature must be above the dew point to avoid condensation. Minimum temperature for curing is 0°C/32°F, minimum relative humidity 30%. In confined spaces provide adequate ventilation during application and drying.
Reference is made to separate application instructions.

PRECEDING COAT: HEMPADUR-system or GALVOSIL according to specification.

SUBSEQUENT COAT: None.

REMARKS:

VOC - EU directive 2004/42/EC:

	As supplied	10 vol. % thinning	Limit phase I, 2007	Limit phase II, 2010
VOC in g/l	225	290	550	500

VOC:

For VOC of other shades, please refer to Safety Data Sheet.

Colours:

Certain lead-free red and yellow colours may discolour when exposed to chlorine- containing atmosphere.
Leaded colours may become discoloured when exposed to sulphide-containing atmosphere.

Service

temperatures:

At service temperature above 100°C/212°F, slight discoloration may be expected

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 drying time and recoating interval. Normal range is 100 - 125 micron/4 -5 mils.
If the product is specified in lower film thickness, more thinning will be needed for proper film formation during spray application - additionally the colour in the preceding coat should be considered to reduce contrast.

Recoating on HEMPADUR:

Recoat intervals related to later conditions of exposure:
(150 micron/6 mils dry film thickness of HEMPAXANE CLASSIC 55000):

	Minimum			Maximum		
Surface temperature	20°C/68°F			20°C/68°F		
Recoated with (quality numbers only)	Atmospheric			Atmospheric		
	Mild	Medium	Severe	Mild	Medium	Severe
55000	6 hours	6 hours	7 hours	30 days	30 days	30 days

Thinner: THINNER 08080 is recommended in general. THINNER 08510 may be used alternatively depending on local conditions.

Exposure to humidity: HEMPAXANE CLASSIC 55000 will resist condensation and light rain after the dry to touch stage has been reached.

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

Application onto zinc silicate:

It is recommended to apply HEMPAXANE CLASSIC 55000 by using a "mist-coat" procedure **provided** the paint temperature is approximately above 20°C/68°F: A thin, undiluted coat is applied (the mist coat) and after a few minutes, a second coat is applied in the full specified film thickness. If the paint temperature is below 20°C/68°F, thinning (max 15%) may be required.
HEMPAXANE CLASSIC 55000 is for professional use only.

ISSUED BY: HEMPEL A/S - 5500017380CR005

This Product Data Sheet supersedes those previously issued.

For explanations, definitions and scope, see "Explanatory Notes" in the HEMPEL Book.

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



Application Instructions

For product description refer to product data sheet

HEMPAXANE CLASSIC 55000

BASE 55009 with CURING AGENT 98000

Scope: These Application Instructions cover surface preparation, application equipment and application details for HEMPAXANE CLASSIC 55000.

Surface preparation: **General:** HEMPAXANE CLASSIC 55000 is mainly intended as a combined intermediate and topcoat for atmospheric service. For mild environments the product can be used directly to metal as a one-coat system.

NEW STEEL:

When used as intermediate and/or finishing coat, surface preparation according to Product Data Sheet for the preceding primer coat (GALVOSIL and/or HEMPADUR primers).

When used as a self-priming coat, surface preparation should include removal of oil and grease with suitable detergent, salt and other contaminants by (high pressure) fresh water cleaning and finally abrasive blasting to Sa 2½ or according to specification.

GALVANISED STEEL, ALUMINIUM and STAINLESS STEEL:

Remove oil and grease with suitable detergent, salt and other contaminants by (high pressure) fresh water cleaning. Make a light abrasive sweep blasting with a non-metallic (mineral) abrasive that is free of chlorides, to a uniform matt surface with a dense profile.

When applied to HEMPADUR:

The over-coating interval must be observed - consult the APPLICATION INSTRUCTIONS or the Specification for the relevant HEMPADUR. The epoxy surface must be clean prior to application.

When applied to GALVOSILS:

HEMPAXANE CLASSIC 55000 can be applied when the GALVOSIL is cured. Consult APPLICATION INSTRUCTIONS for the relevant GALVOSIL. Remove oil and grease etc. with suitable detergent. Remove salt and other contaminants by high pressure fresh water cleaning. After exposure to high humidity, zinc salts, "white rust", must be removed carefully by high pressure fresh water cleaning, if necessary combined with scrubbing with stiff nylon brushes. For application procedure see next pages.

REPAIR AND MAINTENANCE:

Spot-repairs/joints:

Clean damaged areas/welding seams thoroughly by power tool cleaning to minimum St 2 (spot-repairs) or by abrasive blasting to minimum Sa 2, preferably Sa 2½ according to specification. Improved surface preparation will improve the performance. Feather edges to sound and intact coating and roughen adjacent intact HEMPAXANE CLASSIC 55000 coating onto which an overlap will be applied. Touch up bare steel with the specified primer and apply HEMPAXANE CLASSIC 55000 over the primed and roughened area.



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Application: HEMPAXANE CLASSIC 55000 being a high solids and a relatively high viscosity material based on special binder chemistry, may require special measures to be taken at application.

Spray application: **Film-build/continuity:** With this paint material applied in one/few coat(s) it is of special importance that a continuous, pinhole-free paint film is obtained at application of each coat. An application technique which will ensure good film formation on **all** surfaces must be adopted. It is very important to use nozzles of the correct size, not too big, and to have a proper, uniform distance of the spray gun to the surface, 30-50 cm should be aimed at. Furthermore, great care must be taken to cover edges, openings, rear sides of stiffeners etc. Thus, on these areas application of a stripe coat will therefore be good painting practice. To obtain good and steady atomizing, the viscosity of the paint must be suitable and the spray equipment must be sufficient in output pressure and capacity. At high working temperatures, use of extra thinner may be necessary to avoid dust-spray.

The paint layer must be applied homogeneously and as close to the specification as possible. Avoid exaggerated film thickness due to the risk of sagging, cracks and solvent retention. The paint consumption must be controlled.

The finished coating must appear as a homogeneous film with a smooth surface and irregularities such as dust, dry spray, abrasives, should be remedied.

Wet/dry film thickness: Please note that the thixotropic nature of HEMPAXANE CLASSIC 55000 may give a rather "wavy" surface of the paint just after application. This smoothens at drying, but can make it necessary to let the wet film readings be of a higher value than indicated. In many cases the wet film thickness, reading should be 25 micron/1 mil higher than calculated. As the wavy surface becomes smoother during drying these extra wet films thickness readings will not cause a higher paint consumption than otherwise stipulated.

Film thickness/thinning: HEMPAXANE CLASSIC 55000 is normally specified in 100 - 125 micron/4-5 mils. Depending on ambient conditions, usually maximum 5% thinning with THINNER 08080 is relevant, however, increasing at high temperatures to ensure proper film formation and avoid dust spray. May be specified down to 75 micron/3 mils. To obtain optimum film formation in film thicknesses lower than 100 micron/4 mils dry film thickness additional thinning with 10-15% THINNER 08080 is recommended.

Brush application: Use a brush with natural bristles - maintain a wet edge. By application with brush, a more uneven paint film is obtained; this can be counteracted by the application of more coats and thinning.

Roller application: Is in general not recommended due to the formation of stable air bubbles. In exceptional cases a roller can be used, but air bubbles should during the process be levelled out by the use of a brush.

Application onto GALVOSIL: HEMPAXANE CLASSIC 55000 can be applied directly onto a fully cured zinc-silicate (GALVOSIL) coating. Zinc-silicate coatings are porous and the porosity depends on the actual application of the zinc-silicate, the film thickness and the state of aging. Popping and bubbles may develop when the zinc-silicate is over-coated depending on the porosity and application method. The following methods have been used successfully in order to minimize/eliminate the popping and bubbling:

"Flash coat" procedure: Provided the paint temperature is above approximately 20°C/68°F: A thin, undiluted coat is applied (the flash coat) and after a few minutes, a second coat is applied in the full specified film thickness. If the paint temperature is below 20°C/68°F, thinning (max 15% THINNER 08080) may be required. The flash coat is not intended to form a closed uniform film.

"Sealer coat" procedure: HEMPAXANE CLASSIC 55000 is diluted 100 % with THINNER 08080 and a very thin coat is applied (the sealer coat) - the sealer coat should provide a blotchy non-uniform appearance. One or two passes of the sealer coat should be applied - depending on the actual condition of the GALVOSIL surface. After approx. 1 hour (20°C/68°F) a second coat (undiluted) is applied in the full specified film thickness.

The actual condition of the zinc-silicate may vary from case to case and it may be necessary to try both methods to get the optimal result.



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Physical data versus temperature:

Drying time and recoating interval vary with humidity and temperature:

HEMPAXANE CLASSIC 55000 in a dry film thickness of 100-125 micron/4-5 mils:

Surface temperature:	0°C/32°F	10°C/50°F	20°C/68°F	30°C/86°F	40°C/104°F
Drying time (approx)*	12 hours	8 hours	6 hours	3 hours	2 hours
Curing time (approx)**	1 month	14 days	7 days	5 days	3 days

* measured at a relative humidity of 50 %, drying time is increased at lower humidity and decreased at higher relative humidity during drying.

** Curing time is independent of humidity

Surface temperature:	0°C/32°F	10°C/50°F	20°C/68°F	30°C/86°F	40°C/104°F
MINIMUM recoating interval for recoating with HEMPAXANE:					
	12 hours	8 hours	6 hours	3 hours	2 hours
MAXIMUM recoating interval for recoating with HEMPAXANE:					
	3 month	60 days	30 days	15 days	7 days

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

Recoating intervals:

Recoating intervals between epoxy coatings (HEMPADUR) and polysiloxane coatings (HEMPAXANE) - and between two coats of polysiloxane are narrow and critical for good adhesion and should be observed strictly.

This may require changed coating procedures in relation to larger projects where primers and intermediates are typically applied in one location and the topcoat on the final site. Such changed procedures may include the application of primer only in the shop and intermediate and topcoat on site or by the application of a thin/diluted epoxy bridge coat on site just before application of HEMPAXANE CLASSIC 55000.

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. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.

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