

For product description refer to product data sheet 55030

- Scope:** These Application Instructions cover surface preparation, application equipment and application details for HEMPAXANE LIGHT 55030.
- Surface preparation:**
- General:**
HEMPAXANE LIGHT 55030 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 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 LIGHT 55030 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 LIGHT 55030 coating onto which an overlap will be applied. Touch up bare steel with the specified primer and apply HEMPAXANE LIGHT 55030 over the primed and roughened area.
- Application:** HEMPAXANE LIGHT 55030 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:** 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 LIGHT 55030 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 LIGHT 55030 is normally specified in 50 - 80 micron/ 2 – 3.2 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.

Application Instructions

HEMPAXANE LIGHT 55030

55030: BASE 55039 with CURING AGENT 98000



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. To improve the levelling and obtain even films the HEMPEL'S BRUSH AND ROLLER AGENT 99140 can be used up to 5% vol/vol.

Roller application: Roller can be used, but air bubbles could be provoked by during the process, and should be levelled out by the use of a brush. To improve the levelling and obtain even films the HEMPEL'S BRUSH AND ROLLER AGENT 99140 can be used up to 5% vol/vol.

Application onto GALVOSIL: HEMPAXANE LIGHT 55030 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 LIGHT 55030 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.

Physical data versus temperature: Drying time and overcoating interval vary with humidity and temperature:

HEMPAXANE LIGHT 55030 in a dry film thickness of 50 - 80 micron/ 2 – 3.2 mils:

Surface temperature:	0°C/32°F	10°C/50°F	20°C/68°F	30°C/86°F	40°C/104°F
Fully cured	1 month	14 days	7 days	5 days	3 days

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 overcoating interval for overcoating with HEMPAXANE:	12 hours	8 hours	6 hours	3 hours	2 hours
Maximum overcoating interval for overcoating with HEMPAXANE:	Ext.	Ext.	Ext.	Ext.	Ext.

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

Please note that overcoating intervals in Presale specifications and other recommendations may differ from the above due to the specific overcoating product, service conditions and application circumstances.

Overcoating intervals: Overcoating 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 LIGHT 55030.

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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These Application Instructions supersede 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. 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.