Application Instructions

Hempel's Light Primer 45551

Base 45559 : Curing Agent 95360
Mixing: 2 : 1 by volume

Description:	**Hempel's Light Primer 45551** is a two-component, epoxy high build solvent based primer and undercoat. Helps prevent osmotic blistering in glass fibre. Protects against general corrosion.
Scope:	These APPLICATION INSTRUCTIONS cover surface preparation, application equipment, and application details for **Hempel's Light Primer 45551**.
SURFACE PREPARATION:	**Glass fibre:** Degrease the surface with a suitable degreaser. (**Hempel's Degreaser 99611**). Sand with fine sandpaper (No. 180), remove dust. **Iron and steel:** Remove oil and grease etc. with a suitable detergent. Remove salt and other contaminants by high pressure, fresh water cleaning. Abrasive blasting to Sa 2½, SSPC-SP-10. Small areas may be mechanically sanded to leave a metallically clean and rough surface. **Aluminium:** Remove oil and grease etc. with a detergent suitable for aluminium surfaces. (**Hempel's Pre-Clean 67602** diluted 1-20 with fresh water). High pressure, fresh water clean. Abrasive sweep with a non-metallic abrasive to produce a uniformly roughened surface. **Plywood:** Sand and remove all dust. Saturate the surface, especially the edges with a suitable sealer. (**Hempel's Sealer 05991)**. Any surplus product should be removed with a clean cloth to avoid a glossy film after drying. **Ferro-cement:** Abrasive blast or high pressure water jet the surface to obtain a rough and firm surface free of scum layer and contamination. Remove dust and loose material. Saturate the surface with a suitable sealer. (**Hempel's Sealer 05991**). Any surplus product should be removed with a clean cloth to avoid a glossy film after drying. Fill and fair the surface with a suitable epoxy filler. (**Hempel's Epoxy Filler 35253/1** or **Hempel's Profair 35290**). **Previously coated surface - 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 sanding with dry abrasive paper or abrasive blasting, power tool cleaning, or other suitable cleaning methods dictated by the substrate. Feather edges to sound and intact areas. Dust off residues. **Hempel's Light Primer 45551 should not be applied on paints of another generic type.**
CLEANING OF TOOLS:	Tools should be cleaned immediately after use with a suitable thinner or degreaser. (**Hempel's Thinner 08451** or **Hempel's Degreaser 99611**).

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APPLICATION DETAILS:	BRUSH/ ROLLER/PAINT PAD
Thinner:	**Hempel's Thinner 845 (No 5) 08451 :** max 20% Approximately 5-10% thinning is recommended for application with brush, paint pad or roller. Certain conditions may also require adding more thinners to the mixed product during application.
Indicated film thickness, dry:	60 micron [2.4 mils]
Indicated film thickness, wet:	120 micron [4.8 mils]

Overcoating:
BRUSH, ROLLER, PAINT PAD: When **Hempel's Light Primer 45551** is applied in 60 micron dry film thickness the following overcoating intervals are valid:

To overcoat **Hempel's Light Primer 45551** with **Hempel's Light Primer 45551**

Surface temperature		5°C	10°C	20°C	30°C
Hempel's Light Primer 45551	Minimum Maximum	12 hours 90 days	8 hours 60 days	4 hours 30 days	3 hours 20 days
Fully cured		21 days	14 days	7 days	5 days

To overcoat **Hempel's Light Primer 45551** with the following:

Hempel's Epoxy Filler 35253/1	Minimum Maximum	- -	8 hours 60 days	4 hours 30 days	3 hours 20 days
Hempel's Profair 35290	Minimum Maximum	- -	- 60 days	- 30 days	- -
Hempel's Profiller 35370	Minimum Maximum	- -	- 60 days	- 30 days	- -

Hempel's Underwater Primer 26030*	Minimum Maximum	8 hours 16 hours	4 hours 8 hours	2 hours 4 hours	1 hour 2 hours

Overcoat whilst **Hempel's Light Primer 45551 is still tacky.*

Hempel's Silic One Tiecoat 27450	Minimum Maximum	- -	4 hours 8 hours	2 hours 4 hours	- -

Hempel's Non-Slip Deck Coating 56251*	Minimum Maximum	3 hours 12 hours	2 hours 8 hours	1 hour 4 hours	¾ hour 3 hours

***It is recommended to vigorously abrade primer surface for optimum adhesion before application of the product.*

Hempel's two-component topcoats	Minimum Maximum	12 hours 9 days	8 hours 6 days	4 hours 3 days	3 hours 2 days

APPLICATION DETAILS:	AIR SPRAY
Thinner:	**Hempel's Thinner 845 (No 5) 08451:** max 20% If conditions of application are difficult, then the product can be thinned up to 40%.
Indicated film thickness, dry:	60 micron [2.4 mils] 3-5 coats may be necessary to obtain full film thickness.
Indicated film thickness, wet:	120 micron [4.8 mils]
Nozzle orifice:	1.6 – 1.8 mm
Nozzle pressure:	1.8 – 2.2 bar

Overcoating:
AIR SPRAY: Overcoating Intervals depend on thickness (total DFT when all coats needed to achieve full film thickness have been applied).

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Base 45559 : Curing Agent 95360
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APPLICATION DETAILS:	AIRLESS SPRAY
Thinner:	**Hempel's Thinner 845 (No 5) 08451**: max 10% If conditions of application are difficult, then the product can be thinned up to 40%.
Indicated film thickness, dry:	100 micron [4 mils] The indicated film thickness of 100 micron is only obtainable by airless spray.
Indicated film thickness, wet:	200 micron [8 mils]
Nozzle orifice:	0.017 – 0.021
Nozzle pressure:	175 bar

Overcoating:
AIRLESS SPRAY: When **Hempel's Light Primer 45551** is applied in 100 micron dry film thickness the following overcoating intervals are valid:

To overcoat **Hempel's Light Primer 45551** with **Hempel's Light Primer 45551**

Surface temperature		**5°C**	**10°C**	**20°C**	**30°C**
Hempel's Light Primer 45551	Minimum Maximum	24 hours 90 days	16 hours 60 days	8 hours 30 days	6 hours 20 days
Fully cured		21 days	14 days	7 days	5 days

To overcoat **Hempel's Light Primer 45551** with the following:

Hempel's Epoxy Filler 35253/1	Minimum Maximum	- -	16 hours 60 days	8 hours 30 days	6 hours 20 days

Hempel's Underwater Primer 26030*	Minimum Maximum	8 hours 16 hours	4 hours 8 hours	2 hours 4 hours	1 hour 2 hours

Overcoat whilst **Hempel's Light Primer 45551 is still tacky.*

Hempel's Non-Slip Deck Coating 56251*	Minimum Maximum	3 hours 12 hours	2 hours 8 hours	1 hour 4 hours	3/4 hour 3 hours

**It is recommended to vigorously abrade primer surface for optimum adhesion before application of the product.*

Note: **Overcoating**
If the maximum overcoat interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Note: **Application of Antifouling**
Recommended system:
Hempel's Light Primer 45551 / Hempel's Underwater Primer 26030 / Hempel's Antifouling:
Good top adhesion/protection, easier maintenance and cost saving in the long term, particularly suitable for full coat application and new boats.
Advantage: For seasonal maintenance, when Antifouling is exhausted, a new coat can be applied directly on top of **Hempel's Underwater Primer 26030.**

Alternative system:
Hempel's Light Primer 45551 / Hempel's Antifouling:
Good top adhesion/protection and faster maintenance in the short term, option for touch up and spot repair.
Antifouling must be applied whilst **Hempel's Light Primer 45551** is still tacky.
Disadvantage: For seasonal maintenance, when Antifouling is exhausted, a new coat of **Hempel's Light Primer 45551** is required to secure adhesion.

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. Use only in well ventilated areas.

ISSUED BY: HEMPEL A/S - 45551