

For product description refer to product data sheet 45551

Description: HEMPEL'S LIGHT PRIMER 45551 is a two-component, epoxy high build solvent based primer and undercoat. Prevention and repair of 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 HEMPEL'S DEGREASER 99611. Abrade the surface with sandpaper no. 180, remove all dust.

Iron and 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-SP10. Small areas may be mechanically grinded to leave a metallically clean and rough surface.

Aluminium: Remove oil and grease etc. with suitable detergent for aluminium surfaces, e.g. HEMPEL'S PRE-CLEAN 67602, followed by (high pressure) fresh water cleaning. Abrasive sweeping with non-metallic abrasive to produce a uniformly roughened surface.

Plywood: Sand the surface carefully and remove dust. Saturate the surface, especially the edges, with HEMPEL'S SEALER 05991 - remove surplus to avoid a glossy layer of sealer 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. If mechanical treatment is impossible the surface may be acid etched. For this purpose an approximately or 5% w/w nitric or phosphoric acid solution is recommended.

Note: Strong acids, avoid skin contact! The concrete should be saturated with fresh water prior to etching to prevent corrosion of the steel reinforcement. Leave the acid to react 3-4 minutes and hose down the surface with fresh water - preferably with a 5% w/w sodium hydroxide solution - and scrub carefully. Hose down with fresh water. After that the surface must dry homogeneously and appear as an even, rough surface free of a loose outer layer. The surface must have a pH reaction of between 6.5 and 8.0. If any of these conditions are not fulfilled, the process must be repeated. The surface must be dried with good ventilation for at least 2 days (65% relative humidity (20°C/68°F)). The pre-treatment is controlled by scraping with a strong knife. The surface shall feel solid and hard, and the knife must only leave a clear scratch mark. Saturate the surface with HEMPEL'S SEALER 05991 - remove surplus to avoid a glossy layer of sealer after drying. Fill and fair the surface with HEMPEL'S EPOXY FILLER 35253/1 or HEMPEL'S PROFILLER 35370.

Repair and maintenance: Remove oil and grease with suitable detergent; 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. Brush off loose material.

Cleaning of tools: Tools should be cleaned immediately after use with HEMPEL'S THINNER 08451 or HEMPEL'S DEGREASER 99611.

Application details and overcoating intervals:

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]

BRUSH, ROLLER, PAINT PAD: When HEMPEL'S LIGHT PRIMER 45551 is applied in 60 micron/2.4 mils 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	12 hours	8 hours	4 hours	3 hours
	Maximum	(90 days)	60 days	30 days	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	-	8 hours	4 hours	3 hours
	Maximum	-	60 days	30 days	20 days

HEMPEL'S PROFAIR 35290	Minimum	-	-	-	-
	Maximum	-	60 days	30 days	-
HEMPEL'S PROFILLER 35370	Minimum	-	-	-	-
	Maximum	-	60 days	30 days	-
HEMPEL'S UNIFILLER	Minimum	-	48 hours	24 hours	-
	Maximum	-	-	-	-

HEMPEL'S UNDERWATER PRIMER 26030*	Minimum	8 hours	4 hours	2 hours	1 hour
	Maximum	16 hours	8 hours	4 hours	2 hours

*Overcoat whilst HEMPEL'S LIGHT PRIMER 45551 is still tacky.

HEMPEL'S SILIC ONE TIECOAT 27450	Minimum	-	4 hours	2 hours	-
	Maximum	-	8 hours	4 hours	-

HEMPEL'S NON-SLIP DECK COATING 56251	Minimum	3 hours	2 hours	1 hour	¾ hour
	Maximum	12 hours	8 hours	4 hours	3 hours

*Overcoat whilst HEMPEL'S LIGHT PRIMER 45551 is still tacky.

HEMPEL'S TWO COMPONENT TOPCOATS	Minimum	12 hours	8 hours	4 hours	3 hours
	Maximum	9 days	6 days	3 days	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: AIR SPRAY	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: Overcoating Intervals depend on thickness (total DFT when all coats needed to achieve full film thickness have been applied).

APPLICATION DETAILS:	AIRLESS SPRAY
Thinner:	HEMPEL'S THINNER 845 (No 5) 08451: (AIRLESS SPRAY): max 10% If conditions of application are difficult, then the product can be thinned up to 40%.
Indicated film thickness, dry: AIRLESS SPRAY	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	24 hours	16 hours	8 hours	6 hours
	Maximum	(90 days)	60 days	30 days	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	-	16 hours	8 hours	6 hours
	Maximum	-	60 days	30 days	20 days

HEMPEL'S UNDERWATER PRIMER 26030	Minimum	8 hours	4 hours	2 hours	1 hour
	Maximum	16 hours	8 hours	4 hours	2 hours

*Overcoat whilst HEMPEL'S LIGHT PRIMER 45551 is still tacky.

HEMPEL'S NON-SLIP DECK COATING 56251	Minimum	3 hours	2 hours	1 hour	3/4 hour
	Maximum	12 hours	8 hours	4 hours	3 hours

*Overcoat whilst HEMPEL'S LIGHT PRIMER 45551 is still tacky.

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. Apply only in well ventilated areas.

Issued by:

HEMPEL A/S - 45551

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.