

## Marine Paint Manual

Reference No. 12 - 04B

Issue Date: July 2019 (ES)

### LF-Sea 150 HyB

A biomimetic super-low-friction antifouling that works using a patented water trapping function to lower the hydrodynamic footprint of the hull. Stable and long term antifouling is guaranteed by the using of a low friction special silyl acrylate copolymer. The combination of the clean hull, accurate and predictable low friction and the unique water-trapping technology gives a verifiable effect, lowering the ship's surface friction leading to fuel and CO<sub>2</sub> emission savings. It can be applied over existing antifoulings.

Suitable Use	For ocean going vessels (Medium to high speed)					
Type	Special silyl acrylate copolymer (Tin-free / Super low friction / Hydrolysis / Fuel-saving / Lower CO <sub>2</sub> emissions / High solid)					
Colour	B Brown, B Light Brown					
Gloss	Semi-gloss					
Volume Solids	60 ± 2% (ISO3233:1998)					
Typical Dry Film Thickness	80 ~ 150 μm					
Approx. Wet Film Thickness	133 ~ 250 μm					
Theoretical Coverage	6.00 m <sup>2</sup> /L (100 μm)					
Drying Time	Surface Dry	1 hour	(5°C)	40 minutes	(20°C)	30 minutes (30°C)
	Dry Hard	3 hours	(5°C)	1 hour	(20°C)	40 minutes (30°C)
Interval before Overcoating (by self)	Min.	6 hours	(5°C)	4 hours	(20°C)	3 hours (30°C)
	Max.	—	(5°C)	—	(20°C)	— (30°C)
Interval before Immersion (100μm)	Min.	18 hours	(5°C)	12 hours	(20°C)	10 hours (30°C)
	※ Refer to Note (4).					
Thinner	NIPPON MARINE THINNER 300 (0 ~ 5%, by volume)					
Application Method	Airless Spray	Tip range	0.59 ~ 0.69 mm			
		Fan angle	62° ~ 69°			
		Output pressure	above 150 kg/cm <sup>2</sup>			
	Brush / Roller	For touching up small areas only				
Packaging	Single Pack					
Japan Local Brand	LF-Sea 150 HyB					
Flash Point	24°C					
Surface Preparation	All surfaces to be coated should be clean, dry and free from any contamination, detachment or other defects. High pressure fresh water wash and remove all oil / grease, soluble contaminants, corrosion or any foreign materials.					

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### **Safety**

Take precautions to avoid skin and eye contact (i.e. gloves, goggles, face masks, barrier creams etc.)

Proper ventilation and protective measures must be provided during applications and drying period to keep solvent vapor concentrations within safe limits.

Prior to use, obtain, consult and follow the SDS for this product concerning health and safety information.

### **<Note>**

- 1) The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.
- 2) Use NIPPON MARINE THINNER 300 to wash painting appliances, hoses and guns before and after use.
- 3) The declaration letter of Tin-free Antifouling Paint would not be issued if mixed with the other antifouling paints product or another chemical products.
- 4) Interval before immersion is related to ambient conditions, ventilation, film thickness, and number of coats and will be affected correspondingly. Contact us for actual application.
- 5) For availability of product consult Nippon Paint Marine representatives.
- 6) Unit size and filled volumes can vary due to local regulations.
- 7) Store the paints in paint store.