



# Product Data

## HEMPEL'S ANTIFOULING GLOBIC® 81950

TIN-FREE

### Description:

HEMPEL'S ANTIFOULING GLOBIC 81950 is a high solids, tin-free, self-smoothing and self-polishing antifouling. Polishing is based on an ion exchange, resulting in a hydrolysable activated layer. An inorganic fibre reinforcement of the resin matrix ensures effective polishing control and mechanical strength. A powerful bioactive mixture and its self-renewing effect makes it suitable for protection on deep-sea vessels. The system provides a certain control of roughness. This product does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Antifouling Systems on Ships as adopted by IMO October 2001 (IMO document AFS/CONF/26).

### Recommended use:

As a tin-free antifouling for bottom and boottop on vessels operating at medium to high speed and high activity with short idle periods.  
Aluminium hulls: see REMARKS overleaf.

### Availability:

Part of Group Assortment. Local availability subject to confirmation.

### PHYSICAL CONSTANTS:

Colours/Shade nos:	Brown/60600 - Red/51110
Finish:	Flat
Volume solids, %:	60 ± 1
Theoretical spreading rate:	6.0 m <sup>2</sup> /litre - 100 micron 241 sq.ft./US gallon - 4 mils
Flash point:	29°C/84°F
Specific gravity:	2.0 kg/litre - 16.7 lbs/US gallon
Dry to touch:	4-5 hours at 20°C/68°F
V.O.C.:	355 g/litre - 2.9 lbs/US gallon

*The physical constants stated are nominal data according to the HEMPEL Group's approved formulas. They are subject to normal manufacturing tolerances and where stated, being standard deviation according to ISO 3534-1.*

### APPLICATION DETAILS:

Application method:	Airless spray (see REMARKS overleaf)
Thinner (max. vol.):	08080 (5%)
Nozzle orifice:	.027"-.031"
Nozzle pressure:	270 bar/4000 psi (Airless spray data are indicative and subject to adjustment)
Cleaning of tools:	THINNER 08080
Indicated film thickness, dry:	100 micron/4 mils (See REMARKS overleaf)
Indicated film thickness, wet:	175 micron/7 mils
Recoat interval:	As per painting specification

### 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.

***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.***

***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.***

**HEMPEL**  
Product Data Sheet



## HEMPEL'S ANTIFOULING GLOBIC 81950

SURFACE PREPARATION:	<p><b>Newbuilding:</b> as per relevant painting specification.</p> <p><b>Maintenance:</b></p> <p><b>Existing old selfpolishing or ablative antifouling:</b> Remove possible oil and grease etc. with suitable detergent, followed by high pressure fresh water cleaning for a thorough removal of any possible weak structure of leached antifouling. Allow the surface to dry before coating.</p> <p><b>Sealer:</b> Whether to use a sealer coat or not depends on the type and condition of the existing antifouling.</p>
APPLICATION 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. In confined spaces such as sea chests and stagnant air under large flat bottoms provide adequate ventilation during application and drying. HEMPATEX HI-BUILD 46330, HEMPADUR 45182 or according to specification.
PRECEDING COAT:	
SUBSEQUENT COAT:	None or according to specification.
REMARKS:	This product contains heavy particles. Stir well before use. By providing a constantly active surface during its lifetime, this antifouling is gradually sacrificed in the process.
Colour:	The GLOBIC's are never tinted and as the high load of cuprous oxide influences the shade a certain variation from batch to batch is allowable. Exposure to humid weather shortly after application may cause discolouration. This is a surface phenomenon only and has no influence on performance nor recoatability.
Redocking:	At redocking, HEMPEL'S ANTIFOULING GLOBIC 81950 can be recoated after thorough cleaning and removal of any poorly adhering surface layer on the antifouling. Reference is made to SURFACE PREPARATION above. If recoated with other types of antifouling, other surface preparation methods may be required - contact HEMPEL.
Aluminium hulls:	<b>May be specified on aluminium hulls provided an efficient anticorrosive system in minimum 2 coats of 150 micron/6 mils each has been applied. The anticorrosive system must stay intact during service in order to avoid corrosion of the aluminium caused by the cuprous oxide content of GLOBIC.</b>
Application equipment:	Standard airless heavy-duty spray equipment: Pump ratio: min 45:1 (see Note below) Pump output: min 12 litres/minute (theoretical) Spray hoses: max 15 metres/50 feet, 3/8" internal diameter max 3 metres/10 feet, 1/4" internal diameter <b>Note:</b> If longer spray hoses are necessary, up to 50 metres/150 feet hose (1/2" internal diameter) can be added. The pump ratio must be raised to 60:1 or more, however, the high output capacity of the pump must be maintained. A <b>reversible nozzle</b> is recommended. <b>Filter:</b> Surge tank filter and tip filter should be removed.
Film thicknesses:	<b>Range and control of dry film thickness:</b> 80 micron/3.2 mils to 150 micron/6 mils. Indicated film thickness will vary according to specification. This will alter spreading rate and may influence drying time. In case of multi-coat application, drying time and minimum recoat interval will be influenced by the number of coats and by the thickness of each coat applied - reference is made to the corresponding painting specification. Keep thinning to a minimum to ensure that correct film thickness is obtained. The proper way of governing the film thickness is to sub-divide the areas to be painted and calculate the amount of paint to be applied on each sub-divided area. The exact amount of paint calculated must be applied evenly on the area. For further information, please consult the corresponding painting specification.
Recommended number of coats:	As per specification depending on existing hull condition, trading pattern, and intended service life. No maximum recoat interval, but after prolonged exposure to polluted atmosphere, remove accumulated contamination by high pressure fresh water cleaning and allow to dry before applying next coat. As for other physically drying paints the final hardness will be obtained a few days after application of the last coat. Precautions must be made taking this into account during e.g. out docking.
Undocking:	Minimum undocking time depends on number of coats applied, film thickness, the prevailing temperature and the subsequent exposure/service conditions. For further information, please consult the corresponding painting specification. Maximum undocking time depends on the atmospheric conditions (UV radiation, temperature, degree of atmospheric pollution, etc.). Exposure to the atmosphere in up to 6 months normally presents no problems but extraordinary contamination may call for a freshwater high pressure hosing - contact Hempel.
Note:	<b>HEMPEL'S ANTIFOULING GLOBIC 81950 is for professional use only.</b>
ISSUED BY:	HEMPEL A/S - 8195051110CR009