



## SEAJET 033 SHOGUN

SEAJET 033 SHOGUN is a high performance, self polishing antifouling paint for all types of pleasure craft.

Characteristics:

- Two coats will last up to two seasons in Northern European waters.
- A maximum speed up to 40 knots.

### TECHNICAL DATA

<b>Type</b>	High performance, tin-free, self polishing antifouling paint.
<b>Recommended use</b>	Antifouling for yachts and motorboats.

<b>Surface Preparation</b>	<p>High pressure wash (<math>\pm 200</math> bar) to clean the surface.</p> <p>Existing antifouling in good condition: check the SEAJET antifouling compatibility table. If compatible, apply direct. If the old antifouling is not compatible or unknown, apply a barrier coat of SEAJET 011.</p> <p>Existing antifouling in poor condition: remove antifouling. Antifouling should only be wet sanded or chemically stripped. Never burn-off or dry sand old antifouling.</p> <p>Ensure the surface is dry and free of contamination such as salt, grease or oil. Degrease if required.</p> <p>Apply two coats. Apply an extra coat on leading edges, waterline, rudders and stern gear.</p> <p>New application:</p> <p>GRP/Steel: first sand with P100 abrasive paper, remove all dust and apply SEAJET 011 or SEAJET 117.</p> <p>Wood: first sand with P100 abrasive paper, remove all dust and apply SEAJET 011.</p> <p>Aluminium: DO NOT USE SEAJET 033 Shogun on aluminium surfaces.</p>
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<b>Physical Data</b>	<p>Colour: Dark grey, Mid blue, Navy blue, Red, Black</p> <p>Flash point: 37°C</p> <p>Volume solids %: 48 <math>\pm 2</math></p> <p>VOC (Theoretical): 482 g/l.</p>
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<b>Application Details</b>	<p>Thinner: SEAJET THINNER A</p> <p>Application Data: Brush, roller*, spray (professional use only)</p> <p>Min. Temperature: 0 °C</p> <p>Max. humidity: 85% R.H.</p>
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<b>Spray Details</b>	<p>Tip No.: Graco 619, 721</p> <p>Paint output pressure: 12.0 - 15.0 MPa</p> <p>Thinning: 0 - 5% (by volume)</p>
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<b>Film thickness and spreading rate:</b>	<table border="1"> <thead> <tr> <th></th> <th>Min.</th> <th>Max.</th> <th></th> </tr> </thead> <tbody> <tr> <td>Film Thickness, wet:</td> <td>104</td> <td>260</td> <td><math>\mu\text{m}</math></td> </tr> <tr> <td>Film Thickness, dry:</td> <td>50</td> <td>125</td> <td><math>\mu\text{m}</math></td> </tr> <tr> <td>Spreading Rate:</td> <td>9,6</td> <td>3,8</td> <td><math>\text{m}^2/\text{l}</math></td> </tr> </tbody> </table> <p>(theoretical)</p>		Min.	Max.		Film Thickness, wet:	104	260	$\mu\text{m}$	Film Thickness, dry:	50	125	$\mu\text{m}$	Spreading Rate:	9,6	3,8	$\text{m}^2/\text{l}$
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<b>Preferable preceding coating</b>	SEAJET 011 Underwater Primer.
<b>Preferable subsequent coating</b>	When applying direct to SEAJET 117, apply within 48 hours.

<b>Packing</b>	One Pack Product
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<b>Notes</b>	<p>*Film thickness and spreading rate depends on application method.</p> <p>In case of brush application more layers may be required to achieve the specified film thickness.</p>
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**Coating data**

Temperature	Drying time (at DFT 50 μ)	Overcoating interval (at DFT 50 μ)	Induction time	Pot life	Dry to launch	Remarks
-5 °C	-	-	-	-	-	-
0 °C	Surface dry:5 hours Hard dry 20 hours	Min.: 20 hours Max.: None	-	-	40 hours	-
5 °C	Surface dry:3 hours Hard dry 12 hours	Min.: 12 hours Max.: None	-	-	24 hours	-
10 °C	Surface dry:2 hours Hard dry 8 hours	Min.: 8 hours Max.: None	-	-	18 hours	-
20 °C	Surface dry:1 hour Hard dry 5 hours	Min.: 5 hours Max.: None	-	-	12 hours	-
30 °C	Surface dry:30 min Hard dry 4 hours	Min.: 4 hours Max.: None	-	-	10 hours	-

Note: Drying times and overcoating intervals will increase with increasing film thickness applied.  
 Before re-coating, always check that the existing paint film is 'through' dry.

**Safety information:** If Health, Safety and Environmental information is required a Health and Safety Data Sheet can be obtained from Chugoku Paints B.V.

Personal Protection advice and additional information can be obtained from the product Health and Safety Data Sheet which is available on request. The minimum safety precautions in dealing with this paint are:

- Observe the precautionary notices displayed on the container.
- Provide adequate ventilation.
- Avoid skin contact and inhalation of spray mist.
- If the product comes into contact with the skin, wash thoroughly with luke warm water and soap or suitable cleaner. If the eyes are contaminated, irrigate with water and seek medical advice immediately.
- Since the product contains flammable materials, keep away from sparks and open flames. No smoking should be permitted in the area.

<b>Definitions:</b>	Tolerances:	The numerical information quoted in this Technical Data Sheet is subject to normal manufacturing tolerances.
	Spreading Rate:	The spreading rate can vary depending on application conditions, the geometrical complexity of the structure, the weather conditions, etc.
	Volume Solids:	The volume solids figure given in this Technical Data Sheet is the percentage of dry film obtained from a given wet film thickness under specified application rate and conditions measured by the Chugoku Standard Method corresponding to ASTM method D2697.
	Overcoating Intervals:	The intervals given assume preparation consistent with good painting
	Hard dry:	The time taken until the product can be walked on without damaging it. Time taken until full mechanical strength is obtained is longer.
	V.O.C.:	Theoretical quantity of volatile organic compounds in g/l.

**Disclaimer:** Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user. Product data is subject to change without notice and automatically void two years from issue. All legal relations of Chugoku Paints B.V. will be governed by the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. as last filed with the district court of Rotterdam and upon request they will be made available without charge. Chugoku Paints B.V. explicitly rejects the applicability of any General Conditions, which its contractual parties may use. Exclusive jurisdiction: competent Court in Rotterdam.

The Inspector will undertake to the best of their ability, to carry out assistance during application of the products delivered by Chugoku, by only rendering advice in connection with the application at site. The Inspector undertakes to carry out the project in a conscientious manner, but Chugoku and/or the Inspector will not accept any kind of liability, direct or indirect, if the project does not give the results expected. Under all circumstances, the Buyer remains responsible for the execution of the project. Any advice and/or assistance rendered by the Inspector will be subject to such (final) responsibility of the buyer, and moreover subject to the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. Even when damages or delays have been caused by faults or negligence on the side of Chugoku and/or the Inspector, such will not result in any liability whatsoever of Chugoku or the Inspector. Liability of both Chugoku or the Inspector for any consequential damages is explicitly excluded.

Some products have been specially modified to adapt to specific European requirements with regard to European-, national- and local laws and regulations or with regards to specific European use requirements. As a result some physical properties in a TDS may differ from those given in the original Japanese TDS.