PURPOSE
The purpose of this section is to provide a brief overview of marine fouling and anti-fouling.

FOULING
The marine environment is one of the most aggressive that a coating system needs to protect against. Coating systems are subject to attack from both an aggressive chemical and biological environment.

Slime
Slime is a viscous syrup-like bacteriological layer which allows the development of other micro-organisms to occur. Slime can appear and re-appear depending upon the environmental conditions.

Barnacles
Barnacles reproduce by releasing millions of larvae into the water. These drift around in currents and feed on waterborne nutrients. If a barnacle can attach itself to a stationary object it can feed more efficiently. Boats generally spend a substantial period of time stationary, creating an excellent feeding platform.

Weeds
Weeds also attach themselves to static surfaces. This generally occurs around the waterline where sunlight prevails. Some types of weed will fall off a vessel's hull as soon as it gets underway, however, others will not.

DEGREE OF FOULING
The degree of fouling is affected by many factors, including temperature, salinity, pH, flow speeds, water quality, sunlight and inflows from rivers. As a general rule fouling is greater in tropical waters than in temperate waters and occurs when the vessel is stationary.

REASONS TO PREVENT FOULING
Safety
A fouled craft will not respond as quickly as a craft with a smooth hull, reducing the margin for error. A heavily fouled boat will also sit lower in the water which has obvious implications for seaworthiness.

Hull Protection
The prolonged growth of fouling can damage the hull whether it be of metal, fibreglass of wood. Fouling can also mask hull damage caused by corrosion or impact and affect the hull's integrity.

Speed and Efficiency
With the ever increasing price of fuel the cost of pushing a vessel through the water is a major concern. Heavily fouled boats will either work harder or, be unable to reach their potential speed. Either way the fuel costs will rise due to the drag caused by fouling, increasing journey time.

ANTI-FOULING
Self polishing or ablative anti-fouling coatings will wear away with use at a rate that is controlled by water temperature, salinity, alkalinity, hull speed and time in service. These factors, coupled with those in the Degree of Fouling section make it very difficult to predict the exact life expectancy of an anti-fouling.

As the anti-fouling coating is exposed to the marine environment toxins are released into the stationary laminar water layer that surrounds the hull. This layer has enough toxicity to prevent the settlement of free swimming larvae on the hull. Without the protection of an anti-fouling these larvae would attach and subsequently grow into adult species. The toxins will also gradually leach from the stationary laminar zone into the water surrounding the vessel.
Valspar is committed to quality in the design, production and delivery of its products and services. Valspar’s Australian manufacturing facilities quality management systems are certified to ISO9001.

Valspar’s laboratory facilities are accredited for technical competence with the National Association of Tests Authorities, Australia (NATA) and comply with the requirements of ISO/IEC 17025. Accreditation No.104 (Footscray), 166 (Blacktown), 1154 (Glendenning) and 931 (Kilburn).

For the most up to date information contact Valspar Customer Service Hotline or visit the Wattyl Website.

<table>
<thead>
<tr>
<th>CUSTOMER SERVICE HOTLINE</th>
<th>WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td><a href="http://www.wattylpc.com">www.wattylpc.com</a></td>
</tr>
<tr>
<td>New Zealand</td>
<td><a href="http://www.wattylpc.com">www.wattylpc.com</a></td>
</tr>
</tbody>
</table>

Australia
New Zealand

For the most up to date information contact Valspar Customer Service Hotline or visit the Wattyl Website.

1. This information, provided by Valspar Paint (Australia) Pty Ltd (hereinafter referred to as “Valspar”), is important to ensure that the listed product(s) perform according to the stated application and uses and must be followed to meet Valspar’s warranties express and implied. Valspar advises that you (a) review the Technical Data Sheets (TDS) and Material Safety Data Sheets (MSDS) before you use or handle the product; (b) ensure that the product be used only in accordance with the information provided by Valspar and the product(s) be transported, stored and handled in accordance with the information on the MSDS and relevant TDS; and (c) thoroughly test the product, using the recommended application method on a sample of intended substrate, before using the product. 2. The information in this TDS was prepared using information gathered during product development. While Valspar endeavours to update this information and maintain the accuracy and currency of its contents, Valspar does not warrant that the information provided is current when the product is used or is wholly comprehensive. 3. For all product and non-product related information, Valspar recommends that you conduct such additional investigations as may be necessary to satisfy yourself of the accuracy, currency and comprehensiveness of the information on which you rely in using and handling the product. If you require further information please contact your nearest Valspar office before using the product(s). 4. To the full extent permitted by law, Valspar’s liability for breach of a condition or warranty implied into the contract for sale between Valspar and you by law is limited at Valspar’s election to: (a) the replacement of the product; or (b) payment of the cost of replacing the product. If coating rectification is required Valspar Technical Services shall be contacted prior to commencement. VALSPAR PAINT (AUSTRALIA) PTY LTD (ABN 40 000 035 914)