

## **“PELLER CLEAN SET”**

**“PELLER CLEAN SET”** consists of two products.

One is “PELLER CLEAN PRIMER” (BASE, ADDITIVE, and ADHISIVE AGENT).

Another is the subsequent coat “BIOCLEAN DX” (Silicone foul release coating).

"PELLER CLEAN PRIMER" provides a excellent adhesive property for propeller surface and subsequent coat. "BIOCLEAN DX" is an innocuous long life foul release silicone paint.

It has the following advantages:

- 1) Environmentally friendly.
- 2) Good anti-fouling property.
- 3) Easy application.

### **Foul release mechanism**

The foul release performance of silicone coatings is mainly demonstrated by ultra smooth surface, low surface energy, and elasticity.

The film has the following specific features.

#### **1. Low Surface Tension (Energy)**

Silicone coatings have the low surface free energy due to the chemical structure.

Moreover they are adjusted more effective surface by ingredients.

#### **2. Micro Surface Separation**

Silicone coatings consist of hydrophobic materials and hydrophilic materials. It is hard to solidify protein and similar to the character of the anti-thrombus material.

Therefore the heterogeneous rejection of the adhesive substances (protein etc.) such as barnacle cement is induced, and the adhesion can be prevented.

#### **3. Smooth and flat**

Silicone rubbers have the character which is going to spread with the surface tension.

Therefore, ultra smooth surface is obtained.

#### **4. Low Friction**

Silicone coatings are flat and smooth, and it is adjusted that a friction coefficient may become low.

#### **5. Elasticity**

Silicone coatings form the flat and smooth surface with elasticity.

The surface with elasticity lacks stability for adhesion of marine organisms.

## Packaging

### 1. Primer (Three pack product)

PELLER CLEAN PRIMER Base	400g
ADDITIVE	100g
ADHISIVE AGENT	25g

**Mixing Ratio** 4 : 1 : 0.25 (BASE : ADDITIVE : ADHISIVE AGENT by weight )

### 2. Foul release coating (One pack product)

BIOCLEAR DX	1000g
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Coatable area is about 3m<sup>2</sup> with one set. (In case of 37.5um x 2coats)

## Standard Coating Specifications

Process	Product name	Number of coatings	Dry film thickness $\mu$ m/coat	Coverage g/m <sup>2</sup> /coat	Coating interval 20°C
Surface preparation	(1) Rubbing up the surface with disc sander or power brush.				
Primer coating	PELLER CLEAN PRIMER	1	8	130	3 - 24 hours
Foul release coating	BIOCLEAR DX	2	37.5	75	5 hours -

\*In case of repair coating, high pressure rinse with water are recommended to remove sodium and fouling, before rubbing up the surface of propeller.

#### Remarks:

Minimum drying time to launch is 6 hrs at 20 degree C.

Air spray or Brush application is recommended.

BIOCLEAR DX should be applied evenly.

PELLER CLEAR SET is recommendable for active vessel to be coated around propeller boss as Fig.1

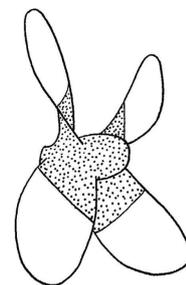


Fig.1

In order to use safely, please confirm the warning label, MSDS and product sheets.