

Technical Data Sheet – PropOne™ System

Description

PropOne™ is a two-coat system comprising an anti-corrosive Primer Coat and a Foul Release Coating (Clear Coat). The Clear Coat is a non-biocidal, low surface energy coating which prevents organisms strongly adhering to the surface of the propeller and fast moving components permanently immersed in water. Organisms can be easily dislodged once the boat is placed in drive.

As with all foul release coatings, when not in use, the surface will be colonized by encrusting organisms. The removal of the fouling organisms is purely a mechanical effect.

The Clear Coat does not prevent marine growth by chemically poisoning the environment.

Coverage

A 1 Litre Kit will cover 3.8m² area

PropOne Primer Coat: 6.3m² per Litre when applying 2 coats

PropOne Clear Coat: 9.5 m² per Litre

Use this table to determine which size PropOne™ kit will be required to coat your running gear.

		Propeller size and number of blades		
		18"-24"	24"-36"	36"-48"
		Three or four blades	Four or five blades	Five blades
Running gear components to be painted	One propeller	250ml Kit	500ml Kit	500ml Kit
	Two propellers	250ml Kit	500ml Kit	1 Litre Kit
	Two propellers, two rudders & two propeller shaft struts	500ml Kit	500ml Kit	1 Litre Kit
	Two propellers, two rudders, two propeller shaft struts & two trim tabs	500ml Kit	1 Litre Kit	1 Litre Kit

Technical Data: Primer Coat

Appearance & Odour	Opaque yellow / sweet - alcoholic
Specific gravity	0.88
Boiling point	81 - 117 °C
Melting point	N/A
Volatile volume	90%
Evaporation rate	Slower than ether
Vapour density	Heavier than air
Solubility in water	N/A
Volatile Organic Compounds (theoretical - as packaged)	708 g/L Emitted VOC

Technical Data: Primer Activator

Appearance & Odour	Water white / sweet - alcoholic
Specific gravity	0.91
Boiling point	81 - 100 °C
Melting point	N/A
Volatile volume	92%
Evaporation rate	Slower than ether
Vapour density	Heavier than air
Solubility in water	100% miscible
Volatile Organic Compounds (theoretical - as packaged)	712 g/L Emitted VOC
pH	3.8

Technical Data: Clear Coat

Appearance & Odour	Hazy - Strong aromatic
Specific gravity	0.99
Boiling point	159 - 176°C
Melting point	N/A
Volatile volume	28%
Evaporation rate	23 (solvent; n-butyl acetate = 100)
Vapour density	Heavier than air
Solubility in water	Immiscible
Volatile Organic Compounds (theoretical - as packaged)	242 g/L Emitted VOC
pH	N/A
Flashpoint	42°C
Touch Dry	~1 hour at 20°C /55% RH, extended by lower temperature or humidity

Miscellaneous Product Information

Mixing ratio: 4 parts Primer Coat: 1 part Primer Activator (by volume), VOC of mixture is 710g/L.
Store at temperatures between 5°C – 27°C (40°F – 80°F).

Pot life of mixed Primer is 4 hours at 25°C (77°F).

Suitable for use on all ferrous and non-ferrous marine alloys, including aluminium.

Not suitable for use in Aquaculture applications.

Note: Do not apply to anodes.

Time to immersion* at 55% RH:
At 10°C (50°F): 16 hours, at 20°C (68°F): 12 hours.

*Lower temperatures or humidity will extend cure time. Minimum application conditions: 10°C (50°F), 55% RH.

Method Statement – PropOne™ System

Surface Preparation¹

It is essential that proper surface treatment be undertaken prior to application. Failure to prepare the surface or apply the primer correctly will lead to product failure and a reduction in the service life of the product. It is intended that solvent cleaning be used prior to the application of primer and in conjunction with surface preparation methods specified for the removal of marine growth, old coatings, rust and corrosion.

1. Surface Preparation

Remove foreign matter (other than grease and oil) by one or a combination of the following:

- Brush with stiff fibre or wire brushes.
- Abrade with emery cloth or mechanical abrasion disc.
- Scrape with an appropriate scraping tool.

Following the above remove surface contaminants. Acceptable methods include:

- Brushing.
- Wiping with a clean cloth.
- Blow off with clean, dry air.
- Vacuum cleaning.

2. Cleaning

Use a clean cloth to scrub metal surfaces with a generous amount of Prop Wash. Do not allow product to dry, applying Prop Wash to one area at a time. Immediately rinse area with clean fresh water, then wipe with a clean damp white cloth to remove Prop Wash. Repeat the process until cloth shows no discolouration.

Now using a clean cloth soaked in acetone wipe all surfaces.

3. Inspection

Inspect all cleaned surfaces for any contaminants. Any areas that are deemed unsatisfactory need to be corrected before any coatings are applied. Immediately apply the PropOne™ system once the surfaces to be coated have been cleaned.

Application of the PropOne™ System

1. Mixing instructions:

Note: Ensure Primer Coat and Primer Activator are mixed at temperatures between 10°C - 30°C. At temperatures above 30°C store product indoors at lower temperatures until immediately before use. High temperatures or breeze causing solvent evaporation may lead to gelation of the primer in the tin once the activator is added. Where rapid evaporation of solvent is judged likely to happen, add and mix in isopropanol equivalent up to 25% of the volume of the primer in the can before adding the activator.

Thoroughly mix the Primer Coat component before combining with the Primer Activator. As with all filled, low viscosity primers, the dense pigments will settle in transit and during storage. First, break up the pigment settled in the base with a wooden paddle, mechanical stirrer, or mixer, and mix to distribute the pigment evenly throughout the base.

After the base is thoroughly mixed, add **ONE** whole bottle of Activator to the contents of **ONE** whole can of Primer, slowly, while mixing. Mix for a further 2 minutes. Replace lid and shake the can for 2 minutes.

2. Primer application:

Apply the Primer sparingly by brushing or rolling. Brushing is generally the preferred method, however roller coating may be used over large flat surfaces. Paint brushes should be clean and dry. When brushed, the Primer must be applied to the hub of the propeller first and then worked out to the edge of the blades. Always brush from the centre of the blade towards the edge to prevent runs. The Primer must not be applied as a thick coating.

Allow to touch dry. Repeat process until total coverage is achieved by applying rapidly with a thin coating to prevent softening and removal of the previous coating. **As soon as the Primer Coating is touch dry apply the Clear Coat.**

3. Clear Coat (FRC) application:

Apply the Clear Coat using a brand new soft clean brush. Apply generously, working from the centre to the edges. Cover all areas of Primer Coat, working systematically to cover all of each area of the propeller or running gear before moving to the next area. Apply one coat only. Check for runs and drips.

Do not allow anything to come into contact with the uncured Clear Coat until it has cured for a minimum of 12 hours.

Clean up Procedure:

- Primer - Clean tools/equipment immediately after use with acetone.
- Clear Coat - Clean tools/equipment with Xylene.

Thoroughly review product label and Safety Data Sheet (SDS) for safety and cautions prior to using this product. Follow manufacturer's safety recommendations when using any solvent.

Disclaimer

While every precaution is taken to ensure that all information furnished in this method statement is as accurate, complete, and useful as possible, Greencorp Marine cannot assume responsibility nor incur any obligation resulting from the use of any materials, coatings, or methods specified herein.

This method statement does not attempt to address problems concerning safety associated with its use. The user of this method statement, as well as the user of all products or practices described herein, is responsible for instituting appropriate health and safety practices and for ensuring compliance with all governmental regulations.

¹ Derived from SSPC-SP 1, Surface Preparation Standards and Specifications - Solvent cleaning standard.