



# Application guide for Propellers/ Running Gear and outboard motors

(Hard film CLEAR COAT Silane - Siloxane Nano foul release coating).

*Armor - Sil* is designed and engineered to be applied on propellers, running gear and outdrives/ outboard motors. Properly applied, the coating will be glass smooth with a surface roughness of less than 5 microns.

#### It can be used on a multitude of substrates including"

Galvanized metal	Stainless Steel
Tin	Steel
Nickel	Bronze
Brass	Copper
Aluminum	Zinc
Mixed Alloys of above	

## PREPARATION

#### Surface Preparation:

- 1. If the craft has been in the water, remove the boat from the water and immediately highpressure water blast in order to remove fouling.
- 2. Mechanically remove fouling by scraping followed by high-pressure water cleaning.
- 3. Remove all accessories from the hull such as trim tabs.

4. The best surface preparation is a fine grit blast (Garnet) to achieve a 1.5 mil (37.5 micron) anchor pattern. Thoroughly sand surface by hand or with an orbital sander using one hundred eighty (120 grit) paper or sanding disks. Edges are critical areas and special care should be taken to insure those areas in particular are properly prepared.

## PLEASE NOTE: Surface preparation is the key to a quality and successful finish.

5. All surfaces must be washed to be free of dust, salt, dirt, oil and grease. Use compressed air to remove residual dust. If latent oils or grease are present, use MEK (Methyl Ethyl Ketone) or other high flash solvent to remove any contamination.

- 6. Mask off the surrounding areas to protect from over spray.
- 7. Apply one coat of PPV 702 etch primer. The wet film thickness should 1 mil (25 microns) and be even and (Refer to TDS and SDS for safety instructions:

Best application method is with an HVLP sprayer. Use a small tip of 1.0 -1.2 mm maximum

- Mix equal parts by volume of A & B.
- Premix or gently shake each component prior to blending A & B to ensure uniformity.
- Can be thinned with PPV 702 reducer (supplied in the kit) between 30 50 % by volume based on total volume of A & B for spraying. May be applied by brush in very tight areas only.
  For exceptionally smooth results spray is the preferred method. A Standard gravity feed HVLP spray gun is preferred. Apply a 1 mil (25 micron) wet maximum film thickness (WFT) coat. 50 percent overlap pattern and cross hatch as required for an even coat.
- 8. Air dry time is 15-30 minutes at 77 F (25C).
- 9. Allow 2-3 hours dry time prior to applying Armor Sil.
- Armor Sil is supplied in 1 pint (473 ml) kits. The material is a 4:1 ratio by volume mix. 4 parts B (Base resin) to 1 part A (Activator). Mix necessary amount required to fill the gun and achieve a 5-6 mil (125-150 micron) thickness maximum. Coverage is:

1 pint mixed = 38 square feet (3.54 sq. meters) Theoretical coverage. Actual may vary due to applicator and wind conditions.

11. Mix A & B with a rotary mixer for 2-3 minutes to achieve a homogeneous solution. Use care to keep the mixer blade submerged as not to entrain air in the fluid.

12. Preferred method of application for large commercial vessel propellers is airless spray only. Use a handheld airless battery operated spray gun such as a Graco 16H 240 True coat pro Fine finish cordless or 17F924 GX fine finish. For large vessel propellers a 30:1 airless pump shall be used. Tip size & Type: Graco Fine Finish Low Pressure (FFLP) .208 for small jobs or a Fine finish .308 tip for large vessel propellers.

\*\* For small vessels: Use a gravity fed HVLP spray gun with a 1.6-1.8 mm tip. \*\*

- 13. Check spray thickness on a sample metal plate prior to application. Do not over apply to cause runs or sags.
- 14. Apply to the edges of propeller first. Follow by application to the blade face.
- 15. Allow a minimum of 24 hours curing at 77 F (25C) prior to immersion. 36 48 hours is ideal.

# Please contact your distributor or Seacoat directly if you have any questions prior to performing the application.

### <u>Safety</u>

It is important to protect yourself and the environment during preparation.

Proper clothing such as disposable paper suits, goggles, a charcoal filter mask, a balaclava cotton hood and good quality dishwashing or chemical resistant disposable gloves.

Protect the ground where you are working so that you can contain the collect residual paint dust and dispose of it according to local regulations.

Prior to applying any coating a survey of the propellers and running gear should be performed to check for cracks or grounding damage. Repair as necessary or contact a professional for an assessment and repair prior to applying the coating.