



Armor –Sil R/G

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

Tin

Nickel

Brass

Aluminum

Mixed Alloys of above

Stainless Steel

Steel

Bronze

Copper

Zinc

PREPARATION

Surface Preparation:

1. If the craft has been in the water, remove the boat from the water and immediately high pressure 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. Thoroughly sand surface by hand or with an orbital sander using one hundred eighty (180 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 (Refer to TDS and SDS for safety instructions: This can be done by spraying with a conventional cup gun sprayer or airless. May be brushed on but spray yields the smoothest finish.
 - Mix equal parts by volume of A & B. Premix each component prior to blending to ensure uniformity.
 - Can be thinned between 30 – 50 % by volume for spraying. May be applied by brush. For exceptionally smooth results spray is the preferred method. An Standard gravity feed conventional spray is preferred. Apply a 1 mil (25 micron) 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**.
10. **Armor – Sil** is supplied in 1 pint (473 ml) and 1 quart (946 ml) kits. The material is a 3:1 ratio by volume mix. 3 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. Coverage is
1 pint mixed = 38 square feet (3.54 sq. meters)
1 quart mixed = 76 square feet (7.08 sq. meters)
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 is with a handheld airless battery operated spray gun. Graco 16H 240 True coat pro Fine finish cordless or 17F924 GX fine finish electric airless sprayer. Tip size: .208 for small jobs. .308 /.311 for large vessel propellers.
13. Check spray thickness on a sample metal plate prior to application. Do not over apply to cause runs or sags.
14. Allow a minimum of 24 hours curing at 77 F (25C) prior to immersion. 36 – 48 hours is ideal.

Safety

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.