



SeaCoat
TECHNOLOGY, LLC

GENERAL APPLICATION GUIDE **Mark V SOC's**

SEA-SPEED V5™ vmt

(Hard film fluorinated foul release coating)

SCOPE

This specification, together with the Product Data Sheet, defines the requirements for the Maintenance and the pre-treatment, abrasive blasting, application, and inspection of an exterior underwater hull surface with a **HULLGUARD™** or **AMERCOAT 240/ SEA-SPEED™ V5** coating system.

STANDARDS

Swedish and Steel Structures Painting Council (SSPC)

- SP-1 Solvent Cleaning
- SP-3 Power Tool Cleaning
- SA-2** or SP-6 Commercial Blast
- SA-3** or SP-5 White Metal
- SA-1** or SP-7 Brush Blast
- SA-2½** or SP-10 Near White Metal Blast Cleaning
- SP-11 Power Tool Cleaning to Bare Metal
- PA-1 Shop, Field and Maintenance Painting
- PA-2 Measurement of Dry Paint Thickness with Magnetic or Electronic Gauges
- PA-3 A Guide to Safety in Paint Application

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas. 77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com



The ideal preparation is to remove all old paint and start with a clean surface. As vessels age many coats of paint are applied over one another and cause hull roughness. This contributes to increased weight, loss of speed and increases the possibility of coating failure.

PREPARATION

Surface Preparation for all Immersed Surfaces

For vessels that have been in operation: remove the vessel from the water and secure adequately in a cradle or on keel blocks. Once the vessel has been secured, remove any and all fouling using high pressure water (3000-5000 psi). If any shell growth is present use metal scrappers to remove.

The hull should be allowed to dry thoroughly prior to starting any grit blasting.

1. STEEL: Abrasive blast steel with an adequate abrasive in order to remove fouling and to create an anchor pattern in order to produce SA2½ (SP-10). WJ -2 is acceptable if a minimum 2.5 mil (62.5)micron profile exists.
2. ALUMINUM: Abrasive blast with an adequate abrasive in order to produce an anchor profile of SA2½ . WJ -2 is acceptable if a minimum 2.5 mil (62.5)micron profile exists.
3. NON-METALLIC: Roughen surface with No. 2 sandpaper to produce an anchor profile of 1.0- 1.5 mils. Remove all fouling off the surface. Be sure old coating is intact and adhering.

Special Areas

All welded areas and appurtenances shall be given special attention for removal of welding flux in crevices.

Weld splatter, slivers, and surface laminations exposed during surface preparation cleaning, shall be removed by grinding.

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas. 77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com



Blast Surface Protection

1. **Steel:** All steel surfaces shall be coated during the same day they are blasted and coated prior to sundown of that day, before any rusting occurs.
2. **Aluminum and Non-Metallic:** Aluminum and non-metallic surfaces do not have to be coated the same day; however, all surfaces not coated the same day must be washed to be free of salt, dirt, oil and grease.

COATINGS:

Coating System applied to clean blasted steel or aluminum:

NOTE: Do not apply a Stripe coating on weld or chines prior to general application of either **HULLGUARD™** or **AMERCOAT 240**.

- | | |
|----------------------|---|
| 1 st Coat | HULLGUARD™ / AMERCOAT 240 or other approved primer /ac @ 200 or 8 mils (200 Microns) DFT. Apply at 10 mils (250 microns) wet film thickness. |
| 2 nd Coat | SEA-SPEED™ V5 Polysiloxane Epoxy @ 200μ or 8 mils (200 microns) DFT. Apply at 9 – 10 mils (225 microns) wet film thickness |

Mixing and Application of **HULLGUARD™ / AMERCOAT 240** and **SEA-SPEED™ V5**

1. Mix all coating materials with a power mixer and apply in accordance with PPG / Seacoat Technology, LLC Product Data Sheet and application instructions.
2. Flush all spray equipment thoroughly before use and between products to ensure no cross contamination. Use only MEK, Ameron T-10 or International 220 for flushing and cleaning of pumping equipment.

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas. 77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com



3. Spray apply first and second coat with airless equipment; for best results we recommend a 68:1 ratio airless or larger (Ideal is 74:1 Premier). Also, the material hose to be 1/2" O.D. and 3/8" I.D.

4. **HULLGUARD™** or **AMERCOAT 240** will be applied in one coat in order to achieve the necessary millage requirements: NOTE: NO STRIPE COAT SHALL BE APPLIED.

Upon completion of grit blasting to the specified profile and compressed air cleaning of the hull and acceptance by inspectors; Apply one coat of **HULLGUARD™** or **AMERCOAT 240** to obtain a 10 mils (250 microns) wet film thickness.

For best adhesion for the **SEA-SPEED V5** as applied over the (**HULLGUARD** or **AMERCOAT 240**) should be allowed to cure to "TACK FREE" stage. (Able to barely leave a thumb print after applying firm pressure). Estimated recoat window for application of SEA-SPEED V5 over the (**HULLGUARD™** or **AMERCOAT 240**) is 4 - 8 hours dependent on ambient temperature. Note that if recoat times are exceeded a tie coat of **HULLGUARD™** or **AMERCOAT 240** may be required at 3 mils (75 microns) DFT prior to applying SEA-SPEED V4.

TOPCOAT (SEA-SPEED V5):

Apply one coat of **SEA-SPEED V5**@ 9 mils (225μ) minimum wet film thickness up to 10 mils (250 μ) wet film thickness.

Apply the SEA-SPEED 12" – 24" from the surface at right angles to the surface. Applicator shall cross hatch while applying to achieve the following wet film thicknesses. Special precautions shall be taken to prevent runs or sags.

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas.77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com



Mix all coating materials in accordance with SeaCoat Technology, LLC Product Data Sheets and application instructions.

HULLGUARD™ or AMERCOAT 240:

1. **HULLGUARD™ or AMERCOAT 240** is supplied in a two component package (4parts resin/1 part cure).
2. Add cure to resin and mix with an explosion proof mixer. Mix thoroughly. Thinner may be added up to 2 % by volume (378.5 milliliters/12.8 ounces per mixed 5 gallon kit) maximum.
3. No induction time prior to commencing application.
4. Tip size shall be 0.021 – 0.025 inch.

Flush all spray equipment thoroughly between products with Ameron T 10 epoxy thinner to ensure no cross contamination.

SEA-SPEED V5:

1. SEA-SPEED is provided in five gallon pails. It is supplied as 1:1 mixture by volume. Black pails contain 2.5 gallons of PART A (activator) color code USN Black: Grey or white pails contain 2.5 gallons of PART B (resin). Premix PART B and add to PART A. While adding PART B to PART A Mix thoroughly with a power mixer until color is fully homogeneous (3-4 minutes). No induction time is required.
2. Spray apply with airless equipment as prescribed. Spray tip shall be 0.017 – 0.021. (419 or 519 provide a good spray pattern)
3. Allow coating to dry thoroughly prior to shifting blocks; (Usually 24 hrs. If weather is cold allow longer up to 72 hours or to the point coating can not be damaged easily.
5. To coat block marks, make sure surface preparation is as prescribed. Lightly sand the new SEA-SPEED V5 approximately 2 inches around with eighty grit paper. Wipe the entire area with MEK or Ameron T-10 thinner.

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas.77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com



6. Apply **HULLGUARD™** or **AMERCOAT 240** on bare metal area only. Do Not overcoat SEA- SPEED. Apply using spray or a four inch wide foam roller, Tip with a natural bristle brush if necessary.
7. Allow **HULLGUARD™** or **AMERCOAT 240** to cure to thumb print stage.
8. Apply SEA-SPEED with a sprayer or foam roller to obtain the required mil thickness. Apply SEA-SPEED over the primer and feather onto the sanded area.

Do not thin material. Use Ameron T 10 solvent or other approved Epoxy thinner for cleaning only. DO NOT USE XYLENE, ACETONE OR LACQUER THINNER.

INSPECTION AND SAFETY

Inspection

1. It is perceived that the vessel will be placed back into the water before the full cure of the **SEA-SPEED™ V5** occurs; hence, in order to insure that a proper dry film thickness is achieved, wet film thickness readings must be taken continuously during application.
2. All DFT measurements and their locations shall be in accordance with SSPC PA-2, paragraphs 1-5, and documented for record.
3. Substrate temperature must be above 50° F (10° C) and at a minimum must be 5° F (3° C) above the Dew Point.
4. Vessel may be placed into the water as soon as the coating system has achieved a hardness that is not easily mechanically damaged.
5. ***For each 10° F under 77° F (6.25° C under 25° C) add 6 hrs to re-float time.***

Safety: Proper attire, such as air masks and goggles must be worn during application. Avoid ingesting coating through the nose or mouth. Refer to MSDS sheets for industrial safety and hygiene procedures. Safety precautions and procedures shall be in strict compliance with SSPC PA-3 paragraphs 1-16

Seacoat Technology, LLC.
11215 Jones Road West, ste H
Houston, Texas. 77065
PH: 832 237 4400 / Fax: 832 237 4414
www.seacoat.com