

# SeaShield Marine Systems

## SeaShield 525 Underwater Epoxy

### Above and Below Water Coating for Concrete and Steel

*SeaShield 525 is a 2-component, 100% solids epoxy system formulated for above or below water use on concrete and steel structures including pilings, bridges, pipelines, pulp mills and other surfaces subject to corrosion in salt or fresh water.*

#### Physical Properties

(unmixed) @ 77°F (25° C)

##### Component "A" (resin):

Specific Gravity	1.30
Viscosity	Thixotropic Paste
Color	White
Shelf Life (closed containers)	2 Years

##### Component "B" (hardener):

Specific Gravity	1.05
Viscosity	Soft Gel
Color	Black
Shelf Life (closed containers)	2 Years

#### Physical Properties

(mixed) @ 77°F (25°C)

Specific Gravity	1.20
Viscosity	Thixotropic Paste
Color	Dark Gray
Solids by Weight	100%
Pot Life (200g)	60 Minutes
Application Temperature	32°F (0°C) to 150°F (65°C)
Service Temperature	32°F (0°C) to 150°F (65°C)

#### Mixing Ratios

		Wt.	Vol.
Base	"A"	67	62
Hardener	"B"	33	38

#### Surface Preparation

All surfaces must be thoroughly cleaned of grease, oils, loose paint, rust, spalling concrete and other interference materials. The adhesion of SeaShield 525 will only be as good as the cleanliness and soundness of the surface. Sandblasting is recommended, however high-pressure water blasting is acceptable. Scraping and other manual means of surface preparation should be avoided since they tend to polish the surface.

#### Mixing

SeaShield 525 Underwater Epoxy has a high viscosity and, thorough mixing is necessary. Mix with a slow speed mixer (350 rpm) or by hand. Make certain that the material is mixed until an even color is developed. It is important that the bottom and sides of the container be scraped to ensure complete mixing.

## Application

Apply by brush, trowel or painters mitt immediately after mixing components. Spread SeaShield 525 smoothly on surface using applicator or mitt to displace water and air bubbles. When starting another pass or handful, start spreading at and away from the previously applied film so as not to trap air bubbles or leave an area of uncoated surface. The typical coverage rates is 80 square feet (7.4 m<sup>2</sup>) per U.S. gallon at 20 mil (500 microns) thickness per coat. A two coat system is recommended in this difficult application environment.

Where a higher build is needed, a thixotropic version can be made available.

## Drying/Cure Times 77°F (25°C)

### SeaShield 525 Coating:

Initial Set	16 Hours
Maximum Overcoating Time	72 Hours

*If this time is exceeded, the surface should be sanded before applying the next layer.*

## Clean Up

Mek/ZyloI — 50:50 mix should be used.

**CAUTION:** This solvent is flammable so there must be no open lights, flames, sparking motors or pilot lights in the vicinity. Smoking near the solvent is to be forbidden. All equipment must be cleaned immediately after use. Acetone is a suitable alternate to Mek/ZyloI.

## Safety and Toxicity

The epoxy resins and hardeners used in SeaShield 525 Underwater Epoxy are considerably less toxic than used in most structural epoxy formulations. However, it is recommended that the products be handled with due care and special clothing, rubber gloves and chemical goggles should be used.

Some people become sensitized when working with epoxy systems. The sensitization may appear

in the form of skin or respiratory reactions. Avoid breathing vapors, particularly if these products are used in a confined area.

Air supplied mask is suitable for use in confined areas. Face mask with respirator #1224 is usually adequate.

## Packaging

SeaShield 525 Underwater Epoxy:  
1 Liter Units (A & B)

## Storage

Store in heated area and on pallets. DO NOT allow products to freeze.

## Warranty

Manufacturer WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. Manufacturer makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling.



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