

Advanced
Environmentally Friendly
Restoratives
Lubricants
Drag Reducers
Protectants
& Water Shields
For:

SAILS
BOTTOMS & FOILS
TOPSIDES
HARDWARE
HATCHES & WINDOWS
WOOD
SPRAY HOODS & COVERS
SHOES & GARMENTS

APPLICATION GUIDE

Sail Protection & Performance Enhancement

General

Sails of all types and ages face damage from sun, water, tearing, friction and mishandling. **SEALnGLIDE** is a water-like topical coating that provides a clear and flexible shield against environmental hazards and heavy use or abuse while providing a long-lasting surface sealant that assists sails to more efficiently inter-act with the wind.



Most Popular: 100 ml SEALnGLIDE + 25 ml ACTIVATOR 25200

Additional items include:

25 ml 25202

1000 ml 25201

1000 ml **REMOVER** 25205

Product Description:

SEALnGLIDE comes in 25 ml, 100 ml and 1000 ml package sizes and is a two-part liquid system comprised of Glaze and Activator components. The 25 ml and 100 ml sizes are configured to allow mixing flexibility for proper sail coverage for most applications while the 1000 ml size is intended for use by sailmakers and related specialists.

SEALnGLIDE works by mixing with appropriate amounts of water (see the Mixing and Coverage section below) and creates a milky white water-like mix that dries clear on sails. A proper coating will last about a year on frequently set sails such as spinnakers and other high tech racing sails and has been known to last for two years and more on Dacron mainsails and headsails.

Intended Uses:

SEALnGLIDE is a UV stable coating that provides a long-lasting protective barrier for sails. Benefits to sails include increased ease of handling due to friction reduction, faster drying through improved water shedding capabilities, improved protection from mildew, reduced abrasion through efficient dirt and mineral repellence, enhanced

aerodynamics through smoother nano surfaces and reduced snagging tendencies via better sliding characteristics.

It is also useful on spinnaker snuffers and launch bags and can improve roller-furling activities as sails roll easier and tighter. Sails stowed in furling masts and booms will fit better and reduce loading on furling mechanisms thus inducing less wear into mechanical and electro-mechanical systems.

How It Works:

SEALnGLIDE is a unique, patented, bio-friendly chemical formulation that provides a nano particle surface coating for all sails. It is UV resistant and creates a slippery, stable and durable surface that prolongs cloth life, eases handling and, through its hydrophobicity, assists in shedding water from sails.

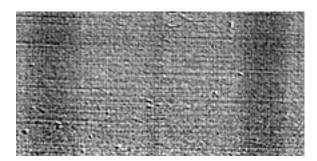
Because nano structures are made up of extremely small particles that are very uniform in size and highly attracted to one another, they seek to combine with each other to fully cover surfaces they come in contact with. This results in the following benefits:

- · Improved aerodynamics resulting from a uniform surface coating.
- Particle angles so steep that water or dirt will not pool or remain trapped in fabrics, seams or fittings.
- Elimination or minimization of degradation potential by overcoating surface voids and defects.
- Friction reduction via the uniformity and slipperiness of the surface layer.

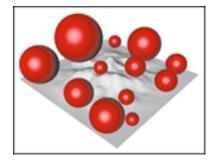
The following close-up image is an absorption-contrast radiograph of a section of a modern laminated racing sail. The surface, although appearing smooth to the human eye is, in reality quite irregular when viewed microscopically. Such irregularities not only provide spaces for water and debris to collect but also are less than ideal aerodynamically.

Coupling these sorts of surface irregularities with protrusions from seams, batten packets, corner fittings, headboards and the like further compounds surface problems.

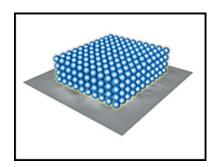
All of this is even more detrimental when materials such as Dacron or other sewn sail types are employed.



Due to irregular particle size non-nano based coatings do not create uniform sail surfaces. Thus, use of such coatings compounds surface irregularities negatively impacting aerodynamics and providing more areas for water and debris containment. They also leave gaps and spaces that allow degradation to begin almost immediately after application through abrasion.



With **SEALnGLIDE** a much more uniform surface is created thus improving all surface characteristics and eliminating gaps and open areas where abrasion can begin the degradation process.



Precautions:

- 1. Ventilation
 - Use with adequate ventilation.
 - Do not spray **SEALnGLIDE**.
- 2. Sail Control / Drying
 - Outdoors with still winds is best for controlling sails.
 - Warm weather works best for drying if outdoors. 65° F (18° C) and up is ideal.
- 3. Slipperiness
 - Do not allow SEALnGLIDE on areas where people or animals walk.
 - · Do not allow SEALnGLIDE onto boat decks or other areas where footing or traction is critical.

Note: Be sure to read the package insert before mixing or applying SEALnGLIDE.

Tools:

Best results are achieved by working in a large enough area to spread a reasonable amount of sail out for coating. The entire sail need not be spread out. This generally can be accomplished on grass, wood, concrete, tile or other hard and clean surface. If only dirt or rough areas are available a clean tarpaulin of appropriate dimensions can serve as a working surface. A reasonably level surface works best in order to insure that **SEALnGLIDE** remains in place while drying.

CAUTION: Any surface coated with SEALnGLIDE will become slippery - tools, work surfaces, etc.

For best results the following will be needed for **SEALnGLIDE** application:

- Assistance for spreading the product, spotting application coverage and folding sails.
- Water for mixing SEALnGLIDE.
- A 1 gallon (4 liter) or larger bucket several can be used if more than one person is applying.
- Sponges for soaking up the mixture and dispersing onto sail.
- Sponge type mop for spreading the mixture once it's dispersed on a section of sail.

Coating Process:

The steps required to provide nano protectiveness and slipperiness to your sails are:

- Clean Sail(s)
- Spread Sail(s) Over Clean Dry Surface
- Mix A Batch Of SEALnGLIDE
- Apply To One Side Of Sail
- Apply To Second Side Of Sail
- Insure That Sail Is Fully Covered
- Let Dry
- Go Sailing

Applying **SEALnGLIDE** is a fairly fast and easy process. As indicated one or two helpers may be useful in order to apply **SEALnGLIDE** quickly and efficiently as well as aiding the sail folding process. This will be dependent on sail size.

A 1,000 square foot (about 93 square meter) spinnaker will take approximately 30 – 45 minutes to apply **SEALnGLIDE** to and may require as much as three hours drying time depending on weather conditions.

1. Clean Sail - Insure that sails to be treated are free of salt and debris before coating with **SEALnGLIDE**. A fresh water rinse and adequate time to dry thoroughly is recommended.

- 2. Spread Sail Spread a section of sail on a clean surface. Best results can be achieved by working along the shortest side of the sail generally the foot. Stretching out a 2 3 foot (about 1 meter) section of the foot fully will also facilitate folding the sail in a "bricking" or accordion manner per normal sail folding techniques while applying **SEALnGLIDE**. The remainder of the sail should be organized to keep it on the clean working surface and available for bricking while applying **SEALnGLIDE**.
- 3. Mix An Appropriately Sized Batch Of SEALnGLIDE The process of mixing SEALnGLIDE consists of the following steps (refer to the Mixing and Coverage section for mixture recommendations):
 - Put appropriate amount of cold water in bucket
 - Thoroughly mix a measured amount of SEALnGLIDE Activator with water in bucket
 - Add the recommended amount of Glaze to water / Activator mix and stir thoroughly

Note: Once mixed a batch of SEALnGLIDE should be applied to sails within 2 to 3 hours.

- **4. Apply** Two methods of application are possible one for smaller dinghy, catamaran, wind surfer and kite board sails and one for larger vessel sails.
- <u>4.1 Smaller Sails</u> Place the sail into a sturdy plastic bag and then add the proper mixture of **SEALnGLIDE**. Once the mixture has been added a hand-operated vacuum pump should be employed to remove as much air as possible from the bag. Then squeeze or crunch the bag occasionally over the next hour to achieve a thorough coating.
- <u>4.2 Larger Sails</u> Application will require unfolding, coating and re-folding side one of the sail then flipping the sail so that side two can be coated as the sail is again unfolded and re-folded.

Use a sponge thoroughly wetted with **SEALnGLIDE** to disperse the mix onto each section of sail that is spread flat. This is best accomplished by hand using a throwing or flinging motion to cause the **SEALnGLIDE** to be sprinkled in a reasonable uniform manner. Perfect dispersion is not necessary. Once a light amount of **SEALnGLIDE** has been applied in this manner then a sponge mop should be used to more uniformly distribute it. This will require that the sail be held flat and smooth while the sponge mop is used to spread the mixture.

Once **SEALnGLIDE** has been spread reasonable smoothly over a section of sail the next accordion fold can be arranged so that a new dry section is arranged for coating.

Note: There is no need for the **SEALnGLIDE** mixture to dry on one treated sail section before moving on to the next. In fact, it is best to move rapidly through this process and fold the sail while wet so that more surface area is covered with wetted sections coming into contact with dry sections.

Continue moving through each accordion fold until all of one side of the sail is coated.

Once one side is complete you can then flip the sail so that as you unfold each accordion fold a dry section on the untreated side is exposed and available for the coating process. Repeat the coating steps on side two of the sail and refold as each area is treated.

After treating both sides of a sail a visual and tactile inspection can be conducted to insure complete coverage.

For the next 2 or 3 hours (this time will vary depending on temperature) the sail should be allowed to dry. It is recommended that the sail be checked as it dries to insure that all areas of are drying properly. It may also be helpful to rub wetter areas against drier areas to aid drying.

If conditions permit excessive drying time will not be a problem.

Mixing And Coverage Guide:

Note: <u>Coverage may vary based on sail material, cleanliness and age.</u> The following information is a guide that will satisfy the majority of situations. Smoother, less porous sailcloth such as spinnaker cloth, Mylar laminates, Kevlar, graphite and other high tech materials will require about half the amount of **SEALnGLIDE** as will coarser Dacron sails of equivalent sail area.

Container Capacities:

SEALnGLIDE

SKU	Package	Mixed Volume	
<u>Number</u>	<u>Contents</u>	<u>Quarts</u>	<u>Liters</u>
25202	25 ml	0.50	0.50
25200	100 ml	2.10	2.00
25201	1000 ml	21.00	20.00

Spinnakers &

riigh rech wateriais			
Sq.	Sq.		
<u>Feet</u>	<u>Meters</u>		
215	20		
860	80		
8,600	800		

Dacrons & Coarse Materials

o our oo matorialo			
Sq.	Sq.		
<u>Feet</u>	<u>Meters</u>		
108	10		
430	40		
4,300	400		

All values listed in the table above are approximate and if unsure how much **SEALnGLIDE** will be needed users are encouraged to check with their sail maker or designer prior to commencing the coating process.

Envere Marine maintains a growing database of sail areas for many boats and may be able to help determine user needs. Contact us at info@envere.com if assistance is needed.

Also, Holmenkol can provide SEALnGLIDE REMOVER if needed for sail repairs or modifications. Sail makers normally purchase this product:

25205 **SEALnGLIDE REMOVER** 1000ml