



INFINISHIELD MARINE APPLICATION PART A

INFINISHIELD represents a novel technology for today's coatings formulator. The coatings exhibit strong anti-corrosive characteristics, also display antifouling and anti-icing properties.

The coatings from this resin are hard, tough, and have excellent abrasion and solvent resistance.

These finishes are also resistant to water, alkali and acids, suitable to use for underwater application.

The most common substrates for Epoxy-Siloxane coatings are: metal, wood, plastic, concrete and masonry substrates.

INFINISHIELD has been formulated into a very low VOC, corrosion and weather resistant coating.

Special features

- excellent corrosion resistance
- extraordinary chemical and weather resistance
- suitable for ultra-high solids coatings
- antifouling and anti-icing properties

Technical information

- delivery form liquid
- appearance clear liquid
- non-volatile content > 99 %
- viscosity at 25 °C approx. 400 mPa s
- epoxy equivalent weight approx. 374 g/eq

Suitability for

- solvent borne
- 2-pack
- high solid
- clear and pigmented coat

Application

Epoxy polysiloxane systems with FST for antifouling coatings.

- offshore/marine coatings
- pipeline coatings
- structural steel coatings
- antifouling and anti-icing coatings
- tank coatings
- anti-graffiti coatings

PROCESSING

Information on guide formulations is available upon request.

- All weather-stable pigments can be used.
- INFINISHIELD is a two part system
- First pack contains Epoxy-Siloxane, pigments, additives,
- Second part contains INFINISHIELD PART B as hardener.
- Dry to touch is approx. 4-5h @ 25°C.

STORAGE

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

PACKAGING

440 lbs. steel drum, 48 lbs. pail

REGISTRATION STATUS

INFINISHIELD ingredients are listed in the following chemical inventories: ECL, EINECS, ENCS, NDSL, PICCS, TSCA.

All ingredients are listed on the TSCA inventory or comply with the TSCA Polymer Exemption criteria according 40 CFR 723.

SAFETY NOTES

Comprehensive instructions are given in the corresponding Safety Data Sheets. They are available on request from INFINITI COATING SOLUTIONS, LLC.

As with any product, use of INFINISHIELD in a given application must be tested (including but not limited to field testing in advance by the user to determine suitability.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.





INFINISHIELD HARDENER

MARINE APPLICATION

INFINISHIELD PART B is a reactive amine terminated silicone curing agent with Nano Fluid Surface Technologies (NFST) used as a crosslinker to improve the antifouling properties and long-term performance of epoxy-siloxane antifouling coatings.

NFST

All solid surfaces, even non-stick or smooth ones, are inherently rough on a microscopic level, creating many points that pin a fluid to the surface and cause it to smear. NFST surfaces feature a stable, immobilized liquid lubricant over-layer. Unlike solid surfaces, this liquid surface is truly smooth and extremely slippery. Fluids and biological fouling agents have nothing to hold on to and slide right off.

NFST transform the surface of a solid material into a thin, immobilized layer of lubricant. This liquid silicon lubricant over-layer completely covers the solid material to create a smooth and slippery liquid surface interface.

Barnacles, mussels and algae stick to the hulls of ships, creating extra drag that costs the shipping industry billions of dollars each year in extra fuel. Most anti-fouling coatings today are copper-based and therefore toxic. Ship operators are looking for an effective and environmentally friendly solution such as the NFST.

SPECIAL FEATURES

- Excellent anti-corrosive resistance
- Excellent adhesion, toughness
- Excellent water and chemical resistance
- Reduces the water absorption
- Excellent compatibility with epoxy-siloxane resins
- Suitable for very high-solids coatings

TYPICAL PROPERTIES

Typical general characteristics	Inspection Method	Value
Boiling point / Boiling range at 1013 hPa		217 °C
Flash point	ISO 2719	>90 °C
Density at 25 °C	DIN 51757	0,98 g/cm ³
Viscosity, dynamic at 25 °C	DIN 51562	approx. 8-15 mPa.s
Refractive index (25°C)		1,420
Purity		97 %
A.H.E.W. (g/eg)		112

These figures are only intended as a guide and should not be used in preparing specifications.



APPLICATION

Epoxy polysiloxane systems with NFST for antifouling coatings.

- offshore/marine coatings
- commercial transport coatings
- pipeline coatings
- structural steel coatings
- rail car coatings
- tank coatings
- ice-phobic coatings
- architectural coatings

Page | 2

PROCESSING

Information on guide formulations is available upon request.

- All weather-stable pigments can be used.
- INFINISHIELD is a 2-part system.
- First pack contains Epoxy-Siloxane,
- Second part contains part A
- Mix A and B thoroughly prior to use.
- Dry to touch is approx. 5h @ 25°C.

STORAGE

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

PACKAGING

400 lbs. steel drum, 42 lbs. pail

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INFINITI COATING SOLUTIONS, INC