



## AMINE TERMINATED SILICON RESIN WITH NANO FLUID SURFACE TECHNOLOGIES

### SAW-112

**SAW-112** 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 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 <sup>3</sup>
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.
- SAW-112 with Epoxy-Siloxane paints are 2-pack system.
- First pack contains Epoxy-Siloxane,
- Second pack contains SAW-112 as hardener.
- Mix SAW-112 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

## REGISTRATION STATUS

SAW-112 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 Biro Technologies Inc.

*As with any product, use of SAW-112 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.