



## EPOXIDE FUNCTIONAL SILICONE RESIN

### ES-401

ES-401 resin 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 polymer 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.

ES-401 can be formulated into a very low VOC, corrosion and weather resistant coating. These systems exhibit excellent dirt pickup resistance and anti-graffiti properties.

ES-401 is less reactive and has a longer curing time than ES-400

*As with any product, use of ES-401 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.*

#### Special features

- excellent corrosion resistance
- extraordinary gloss retention and weather resistance
- chemical resistance
- suitable for ultra-high solids coatings
- anti-graffiti effect

#### Technical information

- delivery form liquid
- appearance clear to slightly hazy liquid
- non-volatile content > 99 %
- viscosity at 25 °C approx. 350 mPa s
- epoxy equivalent weight approx. 480 g/eq

#### Suitability for

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



## Application

- offshore/marine coatings
- commercial transport coatings
- pipeline coatings
- structural steel coatings
- rail car coatings
- tank coatings
- anti-graffiti coatings
- concrete walls and floors
- photocatalytic coatings
- release coatings

## Processing instructions

- All weather-stable pigments can be used.
- Color dispersion in epoxy functional siloxane resin.
- Suitable hardeners are: reactive amine terminated silicon resin (SH-124, SH-120)
- Dilutable by: esters, alcohols and aromatics.
- The maximum film thickness should not be more than 5 mils or 125  $\mu\text{m}$ .
- Avoid thermal cure or accelerated curing conditions at high temperature.
- Additive recommendation: defoamer BYK 085, flow and leveling BYK-378

## Registration status

ES-401 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.

## Packaging

440 lbs. steel drum, 48 lbs. pail

## Safety notes

Comprehensive instructions are given in the corresponding Safety Data Sheets. They are available on request from Biro Technologies Inc.

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.