EUNICOTE ES 891

PROTECTIVE COATING NONTOXIC CYCLOALIPHATIC AMINE EPOXY FOR CONCRETE AND METAL

DESCRIPTION

EUNICOTE ES 891 is a solvent-free, non-toxic, high-build epoxy resin protective coating with excellent chemical and mechanical properties. It comes as a two-component product, ready for site mixing. With high solids content and potable water compatibility, it is ideal for various industrial and structural applications, providing robust protection and durability.

USES

EUNICOTE ES 891 is extensively utilized for:

- lining steel and concrete tanks, valves, and pipes
- For application in interior environments
- Suitable for conventional builds ranging from 100 µm to 150 µm per coat, as well as high builds up to 250 µm per coat
- Wall and floor coating in food processing plants, dairies, hospitals, pharmaceutical industries and car parks

ADVANTAGES

- Self-priming
- Excellent film build and edge protection for enhanced durability
- VOC compliant with current AIM regulations, ensuring non-toxic and potable water suitability
- High chemical resistant protective coating
- Good mechanical properties
- Resistant to sewage discharge

STANDARD

EUNICOTE ES 891 complies with the requirements of :

- ANSI/NSF Std. 61, AWWA D102, and AWWA C210
- FDA 21CFR 175.300 criteria for food contact, making it safe for applications involving food contact

TYPICAL PROPERTIES	
Appearance	White & pipe blue; gloss finish (70 - 85)
Solid Content (by volume)	75% ± 2%
Dry Thickness	100 µm - 250 µm (max. 425 µm per system for potable water applicatons)
Pot Life (@24°C)	90 minutes

Surface temperature & 50% RH	Dry to Recoat (hours)	Dry to Topcoat with other finishes (hours)
10°C	12	24
16°C	8	16
24°C	4	8
32°C	2	4

Note: These times are for a 100 µm - 150 µm dry film thickness. Higher thickness, poor ventilation, or cooler temperatures may extend cure times, risking solvent entrapment and premature failure. Excessive humidity or condensation during curing can interfere, causing discoloration and surface haze.

MIXING

Mixing Ratio: 1:1

The mixing process for EUNICOTE ES 891 involves a systematic approach to ensure a uniform and effective coating. Begin by power mixing Parts A and B separately, ensuring each component is thoroughly blended. Subsequently, combine Parts A and B and engage in another round of power mixing to achieve a homogeneous mixture. It is crucial to avoid mixing partial kits, emphasizing the use of complete kits to maintain the correct ratio and consistency.

APPLICATION

Application Conditions

Material: 16°C - 29°C
Surface: 16°C - 29°C
Ambient: 16°C - 32°C
Humidity: 0% - 80%

Surface Preparation

Surfaces must be meticulously cleaned and dried to remove contaminants like dirt, dust, and oil to sure coating adhesion.

- **Steel Preparation:**

All surfaces should be grit blasted to reach a bright finish, All exposed blow holes should be filled with epoxy paste using
EURIPARE ES6

- Immersion Applications: Follow SSPC-SP10 standards.
- Non-Immersion Applications: Follow SSPC-SP6 standards.
- Surface Profile: Recommended profile of 1.5 mil – 3 mil (38 µm - 75 µm) for enhanced coating adhesion.
- **Concrete Preparation:**
- Curing: 28 days curing at specified conditions for immersion applications.
- Surface Cleaning: Follow ASTM D4258 guidelines.
- Surface Abrading: Perform according to ASTM D4259 standards.
- Void Filling: Surface voids in concrete as needed for a uniform substrate before applying EUNICOTE ES 891.

Application Instructions

Recommended Application Equipment: Brush, roller, and spray.

Brush and Roller Application: Suitable for striping welds but generally discouraged for tank lining due to potential challenges in achieving desired appearance, recommended dry film thickness, and hiding. Multiple coats might be necessary if used. Medium bristle brush recommended for brush application, while short-nap synthetic roller cover with a phenolic core suggested for roller application

Spray Application: Well-suited for high solids coating, allowing quick and efficient attainment of necessary wet film thickness for a uniform and effective coating process. Adjustments in spray techniques may be required to accommodate specific characteristics of EUNICOTE ES 891.

Applicable Topcoats: Acrylics, alkyds, epoxies, and polyurethane for non-immersion applications.

Thinners Usage:

Spray: Up to 6% with thinner.
Brush: Up to 13% with thinner.
Roller: Up to 13% with thinner.

COVERAGE

The coverage of EUNICOTE ES 891 is approximately 30 m²/L at 25 µm.
The coverage of EUNICOTE ES 891 is approximately 6 m²/L at 125 µm.

HEALTH AND SAFETY

For more information, please check the Material Safety Data Sheet.

CONTACT

Al-Faiha for Engineering Products is the exclusive licensee manufacturer for ECA.
For more information, please contact us at techsupport@alfaihaengineering.com.

DISCLAIMER

ECA aims to ensure the accuracy of information and recommendations in the product literature. However, due to variations in materials, substrates, and site conditions, and without control over product application, storage, weather, and usage conditions, ECA cannot be held liable for any resulting issues.