

**Technical Data Sheet**

**Secondary Insulation**

## **EpoxyLite<sup>®</sup> E 213**

**Two-Component Epoxy Motor and Transformer Sealant**

# EpoxyLite® E 213 Epoxy

## Product Description

EpoxyLite® E 213 is a two-component, air-drying epoxy system designed as an exterior sealant for electrical motor windings and associated metal surfaces.

## Features and Benefits

- Low cost protection for stators, armatures, transformers and field coils where full encapsulation is not warranted
- Suitable for Class 130 service
- Will not soften or sag up to 204°C / 400°F
- Excellent chemical and moisture resistance
- Convenient 1:1 mix ratio (by weight)
- Jet black
- High solids

## Application

- Spray
- Brush on
- Pour through

## Transportation / Storage

Store below 25°C / 77°F in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for twelve (12) months from the date of shipment.

Failure to store the product as recommended above may lead to deterioration in product performance.

Mix individual components thoroughly before use

## Health / Safety

Refer to the Material Safety Data Sheet.

See ELANTAS PDG Technical Bulletin *TI-100 - Handling Precautions for Epoxy Resins* for additional information.

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## Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		EpoxyLite® E 213 Resin	EpoxyLite® C 213 Hardener	
Color		Amber	Black	
Non-Volatiles		~ 76	~ 95	%
Weight per Gallon	25°C / 77°F	10.7 – 10.9	10.9 – 11.2	pounds
Flash Point	ASTM D93	41 106	73 163	°C °F
Mix Ratio	Parts by weight	100	100	
Volatile Organic Content	ASTM D3960	2.3 <sup>[1]</sup>		pounds / gallon

<sup>[1]</sup> VOC test methods and limits vary widely by regulatory jurisdiction and product application. The value above was obtained by curing a thin film of mixed material under specific laboratory conditions (0.3 grams - 1 hour - 110°C). Contact your ELANTAS PDG representative regarding alternate methods.

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## Typical Properties of Mixed Materials

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	2500 – 3500	cP

## Application / Cure Schedule

Apply over clean magnet wire or metal surface.

Mix Resin and Hardener in specified ratio. Mix only as much material as will be needed for the job at hand. Approximate pot life is six hours for a one-pound mass, one hour for an eight-pound mass.

Brush on Application:

Use as mixed.

Spray Application:

Thin to the desired extent with ELAN-Plus™ 6001S Reducer. One pint of reducer per gallon of EpoxyLite<sup>®</sup> 213 is appropriate for spraying through a solvent gun at 100 psi air pressure. (Addition of Reducer will also extend pot life.)

Cure:

Complete cure requires one to two days at room temperature.

Alternatively, two hours at 65°C / 150°F will give a hard, tack-free surface.

Recoating:

After coating with EpoxyLite<sup>®</sup> E 213, the first coat should be allowed to dry for four hours at room temperature or baked for 20 minutes at 135°C / 275°F before recoating.

The cure schedules above are based on time after the unit reaches the specified temperature and are recommendations only. The user is responsible for determining the optimum cure conditions for his application.

## EpoxyLite® E 213 Epoxy

### Typical Mechanical Properties

Property	Test Method	Conditions	Value	Units
Water Absorption	ASTM D570	24 h at 25°C / 77°F	0.1	%
Hardness	Sward	25°C / 77°F	25	
Weight Loss		168 h at 130°C / 266°F	< 1	%

### Typical Electrical Properties

Property	Test Method	Conditions	Value	Units
Dielectric Strength	25°C / 77°F	25°C / 77°F – 125 mils	420	volts/mil
Volume Resistivity	ASTM D257	25°C / 77°F	1 x 10 <sup>14</sup>	ohm-cm
Dielectric Constant	ASTM D150	1 kHz – 25°C / 77°F	3.7	
Dissipation Factor	ASTM D150	1 kHz – 25°C / 77°F	.02	

The above properties are typical values and are not intended for specification use.

ELANTAS PDG, Inc. warrants the chemical composition of its products within stated tolerances, but does not guarantee that a product will be appropriate for any particular application. Any recommendation, performance of tests or suggestion is offered merely as a guide and is not a substitute for a thorough evaluation by the user. No representative of ELANTAS PDG, Inc. has the authority to offer a warranty that a product will perform satisfactorily in manufacturing a product and no such representation should be relied upon.