ELANTAS
Electrical Insulation

Technical Data Sheet

Electronic & Engineering Materials

Epoxylite® E 5526 Hi Temp Epoxy

Two-Component Structural Adhesive

ELANTAS PDG, Inc.
5200 North Second Street
St. Louis, MO 63147
USA
Tel +1 314 621-5700
Fax +1 314 436-1030
info.elantas.pdg@altana.com
www.elantas.com

Epoxylite ® E 5526 Hi Temp Epoxy

Product Description

Epoxylite® E 5526 Hi Temp Epoxy is a heat-cured, two-component system consisting of a viscous liquid resin and a finely divided metallic powder hardener.

It is provided in pre-measured kits.

Areas of Application

Structural metal-to-metal bonding applications requiring high strength and thermal stability

Features and Benefits

Exhibits long term thermal stability at 232°C / 450°F.

Negligible loss of bond strength up to 177°C / 350°F

Serviceable to 371°C / 700°F or higher for short periods

Excellent adhesion to stainless steel

Resistant to acids, alkalis, jet fuels and solvents

Application Methods

Apply with spatula or syringe for bonding and sealing applications.

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 six (6) months from the date of shipment.

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

This product is sensitive to moisture and atmospheric humidity. Containers, once opened, should be used immediately or blanketed with dry nitrogen before resealing.

Premix individual components completely before use.

Health / Safety

Refer to the Safety Data Sheet.

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

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		Epoxylite® E 5526 Hi Temp Resin	**Epoxylite® C 5526 Hi Temp Hardener**	
Form	25°C / 77°F	Viscous liquid	Powder	cP
Weight per Gallon	25°C / 77°F	11.2 – 11.6	16.8 – 17.2	pounds
Flash Point	ASTM D93	> 94 > 201	> 94 > 201	°C °F
Mix Ratio	Parts by weight	100	65	

Epoxylite® E 5526 Hi Temp Epoxy

Regulatory Information

Property	Test Method	Value	Units
Volatile Organic Content	ASTM D6053	0.2 [1]	pounds / gallon
RoHS Compliance	Epoxylite® E 5526 Hi Temp Resin and Epoxylite® C 5526 Hi Temp Hardener comply with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 (RoHS 2.0) as amended 31 March 2015.		

[1] VOC test methods and limits vary widely by regulatory jurisdiction and product application. The value above was obtained by curing a thin film under specific laboratory conditions (2 grams - 1 hour - 150°C). Contact your ELANTAS PDG representative regarding alternate methods.

Application and Curing Schedule

Preheat E 5526 Resin to 60 – 65°C / 140 – 150°F to facilitate mixing. Add C 5526 Hardener then mix with mechanical agitation until homogeneous.

Do not use less than the prepackaged amounts of Resin and Hardener as the Hardener is a dry mixture and may vary in composition within the container.

Mixed material has a pot life of 48 hours at room temperature. Pot life can be extended with refrigeration (5°C / 41°F) to several days, or with freezing (-40°C / -40°F) to several months. Mixed product must be stored in a container free of air or blanketed with dry nitrogen.

Refrigerated or frozen containers should be thawed to 16°C / 60°F or higher before opening to avoid moisture condensation.

NOTE: Proper surface preparation is critical to obtaining optimum product performance. See ELANTAS PDG Technical Bulletin TI-3000.

Either of the following cure cycles may be used:

3 hours at 177°C / 350°F – or –
2 hours at 204°C / 400°F

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 5526 Hi Temp Epoxy

Typical Mechanical Properties

Specimens cured at 177°C / 350°F

Property	Test Method	Conditions	Value	Units
Barcol Hardness	ASTM D2583	25°C / 77°F	50	
Lap Shear Strength	MMM-A-132 302 stainless steel oxalic acid etch	-55°C / -67°F 25°C / 77°F 177°C / 350°F 260°C / 500°F	2150 3500 3400 1300	psi psi psi psi

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