SynFlex Elektro GmbH
Auf den Kreuzen 24
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Dolphon® XL-2109 1K Resin

Dolphon® XL-2109 is a 1K resin based on polyester with UV catalysts.

Attributes

Dolphon® XL-2109 has the following outstanding features:

- very low weight loss on cure
- very low odour
- excellent wetting and penetration properties
- very good bond strength
- fast curing cycles
- medium high viscosity
- good adhesion

Application

Dolphon® XL-2109 can be applied in roll-through and automatic machines.

Recommended cycle for roll-through application:

- Pre-heat the windings to 70-80 °C.
- Bring rapidly the windings to a temperature of 140 °C to gel the resin by Joule-effect.
- Cure 30 min. at 150-160 °C by Joule-effect.
- Complete the cure of the resin on the external part of the unit by UV-rays for 5-10 min.

These are general information. For specific conditions please get in touch with us.

Standards

UL approved class H (180 °C).

NEMA - MW-16	Twisted pair 220 °C
NEMA - MW-35	Twisted pair 180 °C
NEMA - MW-28	Tiwsted pair 130 °C

RoHS-compliant 2011/65/EU

REACh-compliant 2006/121/EU

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Delivery forms

Dolphon® XL-2109 is delivered in 25 kg disposable containers, 230 kg barrels or 1,200 kg containers.

Storage

Dolphon® XL-2109 can be stored for 6 months at room temperature (max. 25 °C).

The casting resin must be stored in a cool place and protected against direct sunlight, UV radiation and sources of heat.

Hardening

Recommended cure time:

150-160 °C - 30 min. + 30 min. UV-rays

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Mechanical	Unit of measure	Conditions	Values	Test method
Weight loss	%	15 g at 100-140°C for 20 min.	<3.5	-
Bond strength		ASTM D-2519 HC		
Shear strength	MPa		5	
Bond strength	N	25 °C	170	
Bond strength	N	155 °C	55	ASTM D-2519 HC
Bond strength	N	80 °C	85	ASTM D-25-19 HC

Thermal	Unit of measure	Values	acc. UL1466
Thermal class		H (180 °C)	NEMA-MW-35
Flashpoint	°C	>130	

Liquid phase	Unit of measure	Bedingungen	Werte	Prüfmethode
Gel time	min	at 100 °C	12-22	
Specific density	g/l	25 °C	1150 ± 50	
Viscosity	cps	25 °C	1400-1700	Brookfield

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Liquid phase	Unit of measure	Bedingungen	Werte	Prüfmethode
Viscosity	s	25 °C	60-90	Ford Cup 6
Viscosity	s	25 °C	55-85	DIN Cup 6

Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm		>120	ASTM D-115
Volume resistivity	Ω x cm	50 % RH at 23 °C	1.4 x 10^14	
Spec. resistance	Ω cm	50 % RH at 23 °C	1.2x10^14	ASTM D-257
Dielectric strength	kV/mm	ASTM D-115		