

Technical Data Sheet

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EPIKURE™ Curing Agent 3015

Product Description

EPIKURE™ Curing Agent 3015 is a low viscosity amidoamine, low imidazoline content, fastsetting epoxy curing agent based on tall oil fatty acid and polyamines

Application Areas/Suggested Uses

- Concrete repairs
- River rock mortars
- Tooling compounds
- Metal and plastic adhesives
- Electrical potting
- Castings

Benefits

- Good adhesion
- Good chemical resistance
- Low exotherm
- Low viscosity
- High filler loading

Sales Specification

Property	Units	Value	Test Method/Standard
Amine value	g/eq	420 - 450	ASTM D2896
Viscosity at 25°C	cP	500 - 900	ASTM D2196
Color	Gardner	=8	ASTM D1544

Typical Properties

Property	Units	Value	Test Method/Standard
Equivalent weight, approx.		95	
Pounds/gallon @ 25 °C	lbs/gal	8.0	ASTM D1475

Appearance		Slightly hazy	
Mix ratio, EPON™ Resin 828	pbw	30 - 60	

Performance Properties

Table 1 / Epoxy Systems Cured with EPIKURE™ Curing Agent 3015

	<u>Method</u>	<u>Units</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
EPON™ Resin 828		pbw	100	---	---	---	100
EPON Resin 813		pbw	---	100	---	---	---
EPON Resin 815		pbw	---	---	100	---	---
EPON Resin 8132		pbw	---	---	---	100	---
EPIKURE Curing Agent 3015		pbw	50	50	52	46	40

Handling Properties @ 25°C

Initial viscosity	cP	3,900	800	800	840	5,000
Pot life, 100 gram mass	minutes	49	60	59	90	62

Cured State Properties ¹

HDT	ASTM D648	°C	59	33	40	36	60
Tensile strength	ASTM D638	psi	8,697	4,241	4,738	3,299	9,169
Tensile elongation at break		%	4.1	16.9	13.9	17.5	5.5
Flexural strength	ASTM D790	psi	13,053	6,255	7,549	4,997	14,078
Initial flexural modulus, 10 ⁶		psi	0.35	0.19	0.23	0.14	0.39
Hardness	Shore D		83	71	77	64	83

Chemical Resistance ²

Water	%	0.22	0.31	0.37	0.40	0.16
5% acetic acid	%	1.17	1.36	1.85	1.56	0.62
5% sodium hydroxide	%	0.21	0.25	0.31	0.36	0.20
50% xylene / 50% isopropanol	%	4.52	11.06	11.27	13.65	3.04

¹ Determined on 1/8-inch thick test specimens cured 24 hrs at 25 °C followed by 2 hrs at 100 °C.

² Percent weight gain after immersion for 24 hrs at 25 °C.

Table 2 / Epoxy Systems Cured with EPIKURE™ Curing Agent 3015

	<u>Units</u>	<u>A</u>	<u>B</u>
EPON Resin 828	pbw	100	
EPON Resin 8132	pbw		100
EPIKURE Curing Agent 3015	pbw	45	50

Cure Schedule

@ 25°C	hrs	16	18
@ 80°C	hrs	20	40
@ 150°C	hrs	5	6

Tensile Shear, T-3 aluminum

@ 25°C	psi	2,220	1,740
@ 100°C	psi	345	460

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Please refer to the Hexion web site for Shelf Life and recommended Storage information.

This curing agent product may crystallize after extended storage times. It can be reconstituted by gentle warming of the entire container and its contents to approximately 80°C (176°F) until all visual evidence of crystallization has gone away. Upon cooling to normal ambient temperature conditions the product will regain its original liquid state physical properties.

EPIKURE Curing Agent 3015 should be kept in tightly closed containers in a cool, dry place. Product will absorb moisture and carbon dioxide which may affect viscosity or create foaming when reacted with epoxy resins. EPIKURE Curing Agent 3015 has a tendency to crystallize. Should crystallization occur, it may be converted to liquid by opening the drum bung and gently warming to approximately 80 °C (176 °F).

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. **None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them.** Questions and requests for information on Hexion, Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

Packaging

Available in bulk and drum quantities.

Contact Information

For product prices, availability, or order placement, please contact customer service:
www.hexion.com/Contacts/

For literature and technical assistance, visit our website at: www.hexion.com

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