

# **Technical Data Sheet**

Re-issued August 2007

### **EPIKURE™ Curing Agent 3155**

# **Product Description**

EPIKURE Curing Agent 3155 is a low viscosity, modified polyamide epoxy curing agent based on dimerized fatty acid and polyamines. The low viscosity of EPIKURE Curing Agent 3155 allows formulation of products with high levels of pigmentation and use of little or no solvent, depending on end use application. It is well-suited for use in higher solids coating formulations where low volatile organic content (VOC) compliance is required.

### **Application Areas/Suggested Uses**

- · High solids, VOC compliant industrial maintenance coating
- Maintenance mastic coatings
- Metal and plastic adhesives
- · High build marine primers and topcoats

### **Benefits**

- · Good corrosion resistance
- Good flexibility
- · Superior epoxy resin compatibility
- · Long pot life
- · Good blush resistance
- · Good chemical resistance

## **Sales Specification**

Property	Units	Value	Test Method/Standard
Amine value	mg/g	200-220	ASTM D2896
Viscosity at 25°C	cР	3,000-6,000	ASTM D2196
Color	Gardner	9	ASTM D1544

#### **Typical Properties**

Property	Units	Value	Test Method/Standard
Equivalent weight	AHEW	133	

Density @ 20 °C	lbs/gal	8.2	
Flash point	°F	>230	ASTM D3278

# **Performance Properties**

Table 1 / Properties of epoxy resins in combination with EPIKURE Curing Agent 3155

Composition	Method	<u>Units</u>	<u>A</u>	<u>B</u>	<u>C</u>	D
EPON™ Resin 828			100	_	_	_
EPON Resin 813			_	100	_	_
EPON Resin 815C			_	_	100	_
EPON Resin 8132			_	_	_	100
EPIKURE Curing Agent 3155			70	71	72	67
Handling Properties @ 25°C						
Viscosity, Resin		сР	13,000	600	600	600
Viscosity, System		ср	7875	1860	1955	2120
Gel Time, 100 gram mass		min.	82	275	248	284
Cured State Properties <sup>1</sup>						
Heat Deflection Temperature	ASTM D648	°C	42	<25	<25	<25
Tensile Strength	ASTM D638	psi	6,900	1,500	1,700	1,075
Tensile Elongation		%	9.0	68	54	51
Tensile Modulus		ksi	330	16	15	5
Flexural Strength	ASTM D790	psi	10,260	154	251	83
Flexural Modulus		ksi	320	10	10	5
Compressive Strength	ASTM D695	psi	9.650	16,600	18,800	17,500
Compressive Modulus		psi	0.32	0.02	0.03	0.007
Hardness, heat-cured, 2 hrs @ 100 ° C	ASTM D2240	Durometer D	79	72	69	62

<sup>&</sup>lt;sup>1</sup> Cure Schedule — 1 day at RT + 2 hrs at 100 °C.

Table 2/ Chemical resistance properties of epoxy resins in combination with EPIKURE Curing Agent 31551

Chemical resistance	<u>A</u>	<u>B</u>	<u>C</u>	D
properties <sup>1, 2</sup>				

Water				
After 24 hours	0.26	0.21	0.24	0.22
After 7 days	0.78	0.52	0.64	0.49
5% Acetic acid				
After 24 hours	0.86	0.90	1.13	0.93
After 7 days	2.46	2.33	2.89	2.40
50% xylene / 50% isopropanol				
After 24 hours	5.20	_	_	_
After 7 days	17.0	_	_	_

<sup>&</sup>lt;sup>1</sup> Cure Schedule — 1 day at RT + 2 hrs at 100 °C.

## 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.

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

® and ™ Licensed trademarks of Hexion Inc.

#### DISCLAIMER

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

<sup>&</sup>lt;sup>2</sup> Percent weight gain of immersed 3" x 1" x 0.125" specimens at 23 °C.

PDS-2655- (Rev.7/15/2015 11:23:03 AM)