

## Technical Data Sheet

Re-issued August 2001

### EPIKURE™ Curing Agent 3271

#### Product Description

EPIKURE™ Curing Agent 3271 is a modified aliphatic amine, low to moderate viscosity, fastsetting, high-temperature resistant epoxy curing agent.

#### Application Areas/Suggested Uses

- Fast-setting plastic and metal adhesives
- Tooling gel coats
- Synthetic flooring
- Accelerators for EPIKURE 3000 and 3100 series

#### Benefits

- Low viscosity
- Fast-setting
- High heat distortion temperatures
- Modest blush resistance
- Excellent chemical resistance

#### Sales Specification

Property	Units	Value	Test Method/Standard
Amine as KOH	mg/g	950 – 1,050	ASTM D2896
Viscosity at 25°C	cP	100 – 200	ASTM D2196
Color	Gardner	6 max.	ASTM D1544

#### Typical Properties

Property	Units	Value	Test Method/Standard
Equivalent weight, approx.		34	
Pounds/gallon @ 25 °C	lbs/gal	8.5	ASTM D1475
Flash Point	°F	104	ASTM D3278
Mix Ratio, 190 EEW epoxy	phr	18	
Appearance		Clear and free of	

		foreign particles	

**Performance Properties**

Table 1 / **Properties of EPIKURE Curing Agent 3271**

	<u>Method</u>	<u>Units</u>	<u>A</u>
EPON™ Resin 828		pbw	100
EPIKURE Curing Agent 3271		pbw	18
<b>Handling Properties @ 25°C</b>			
Viscosity		cP	5,500
Gel Time, 100 gram mass		minutes	11-14
Peak Exotherm at 25°C		?°C	216
Cure Schedule		hr/°C	Gelled at RT + 2/100
<b>Cured State Properties <sup>1</sup></b>			
Heat Deflection Temperature	ASTM D648	°C	111
Tensile Strength	ASTM D638	psi	11,500
Tensile Elongation at break		%	6.5
Flexural Strength	ASTM D790	psi	18,000
Izod impact, notched	ASTM D256	ft.•lb./in.	0.64
Hardness		Shore D	93
Weight loss, after 24 hrs at 100°C		%	0.41
<b>Chemical Resistance</b>			
Water		%	0.5
10% H <sub>2</sub> SO <sub>4</sub>		%	0.4
10% Acetic Acid		%	5.5
10% NaOH		%	0.4
Xylene		%	0.1
1,1,-trichloroethane		%	1.5
<b>Electrical Properties</b>			
Dielectric constant, 10 <sup>6</sup> MHz	ASTM D150		4.26
Volume resistivity, at 25 °C		ohm•cm	1.4 x 10 <sup>15</sup>

**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.

To preserve product quality and prevent discoloration, it is recommended that a nitrogen blanket be maintained on the headspace of an opened container and that storage / handling temperatures in excess of 50°C (122°F) be avoided. Spillage around the opening of the container from dispensing operations will form a crystalline residue. This residue is not soluble in the curing agent nor the resin, and certain measures should be taken to prevent it from contaminating the remaining contents of the container. The crystalline residue should be removed with a warm damp wash cloth PRIOR to re-opening the container for dispensing.

EPIKURE 3271 Curing Agent 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. These products will have a minimum shelf life of one year if properly stored in unopened containers.

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/](http://www.hexion.com/Contacts/)

For literature and technical assistance, visit our website at: [www.hexion.com](http://www.hexion.com)

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PDS-3527- (Rev.7/15/2015 11:24:30 AM)