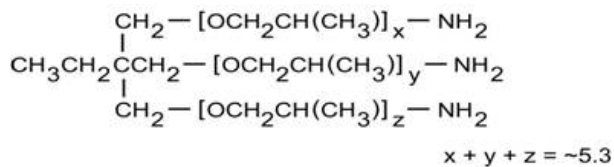


Technical Data Sheet

EPIKURE™ Curing Agent 3233

Product Description

EPIKURE Curing Agent 3233 is an unmodified, T403-type polyoxypropylenetriamine that has moderate reactivity, low viscosity, low color, low vapor pressure and high primary amine content. It resists “blush”, “bloom” and “sweat-out” in epoxy compositions. EPIKURE Curing Agent 3233 is a trifunctional primary amine curing agent with the idealized chemical structure shown below.



Application Areas/Suggested Uses

- Composites (Fiber reinforced products)
- General purpose casting and encapsulation
- Adhesive compounds
- Glaze and sealer high-build coatings

Benefits

- Low viscosity and low vapor pressure
- Light color and improved color retention compared to conventional amine-cured epoxy systems
- Long pot life
- Improved flexibility and good impact resistance

Sales Specifications

Property	Value	Unit	Test Method
Amine Value	343 - 370	mg/g	
Color	50	Pt-Co	ASTMD1209

Typical Properties

Property	Value	Unit	Test Method
Density	8.2	lbs/gal	ASTMD1475
Equivalent Weight	81	AHEW	
Viscosity @25°C	~70	cP	ASTMD2196

Performance Properties

Table 1 / Physical Properties of EPON™ Resin 828 & 863 cured with EPIKURE Curing Agent 3233

EPIKURE Curing Agent 3233

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	<u>Method</u>	<u>Units</u>	<u>A</u>	<u>B</u>
EPON Resin 828		pbw	100	
EPON Resin 863		pbw		100
EPIKURE Curing Agent 3233		pbw	43	48

Handling Properties @ 25°C				
Viscosity, Initial	ASTM D2196	cP	1540	720
Gel Time, 100 gram mass	SHYODU	hrs	8.7	9.5
Gel Time @ 150 °C	Hot Plate	min.	2.0	1.8
Pot Life ¹	ASTM D2196	hrs	2.5	2.5

Cure Schedule		hrs / °C (°F)	2 / 80 (176) 3 / 125 (257)	2 / 80 (176) 3 / 125 (257)
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Cured State Properties				
Heat Deflection Temperature	ASTM D648	°C	79	66
Tg by DSC – midpoint	ASTM D3418	°C	90	82
Tensile Strength	ASTM D638	psi	8,310	8,870
Tensile Elongation		%	5.6	4.1
Tensile Modulus		ksi	400	452
Flexural Strength	ASTM D790	psi	14,730	16,060
Flexural Modulus		ksi	441	502
Casting Density		g/cc		

¹Time to double initial viscosity

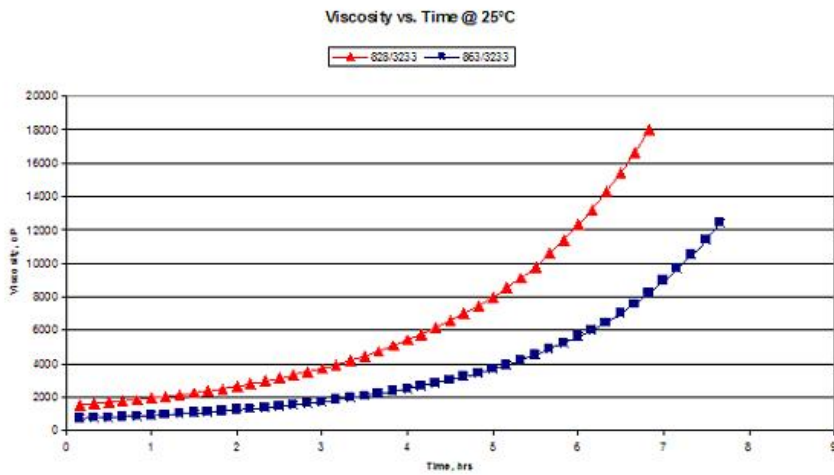
Graph 1 / Viscosity vs. Time at 25°C of EPON Resin 828 & 863 cured with EPIKURE Curing Agent 3233

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General Information

EPIKURE Curing Agent 3233 is an effective curing agent for most types of epoxy resin. It is compatible with modified epoxy resin blends and conventional bisphenol-A and bisphenol-F epoxy resins. Table 1 lists the cured state and handling properties

EPIKURE Curing Agent 3233 is compatible and can be used in combination with most amine curing agents (e.g. aliphatic and cycloaliphatic amines) and a wide range of modifiers (e.g. nonylphenol) to adjust handling characteristics or cured state properties.

EPIKURE Curing Agent 3233 can be cured at room temperature or heat cured. Usually accelerators (e.g., EPIKURE 3253 or EPIKURE 3234) are added to speed room temperature cures.

Clean-out of EPIKURE 3233 in transfer lines and equipment can be accomplished with hot water and steam since it is a water-soluble amine.

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/

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