

# **Technical Data Sheet**

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#### **EPON™** Resin 8132

# **Product Description**

EPON™ Resin 8132 is a 100% reactive low viscosity liquid bisphenol-A based epoxy resin diluted with an Alkyl glycidyl ether. This resin is specially designed for applications requiring low viscosity, minimum odor and good color.

# **Application Areas/Suggested Uses**

- Adhesives
- Decoupage systems
- Thin-set terrazzo flooring and industrial flooring
- Epoxy crack injection systems
- Exposed aggregate wall matrix
- Wet lay-up laminates
- High solids/low VOC high performance architectural coatings

## **Sales Specification**

Property	Units	Value	Test Method/Standard
Weight per Epoxide	g/eq	195 – 215	ASTM D1652
Viscosity at 25°C	Р	5 – 7	ASTM D445
Color 1	Gardner	1 max.	ASTM D1544

<sup>&</sup>lt;sup>1</sup> Method D

### **Typical Properties**

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Property	Units	Value	Test Method/Standard
Specific Gravity	g/ml	1.1	
Density at 25°C	lb/gal	9.2	ASTM D1475
Flash Point 1	°F	>240	ASTM D93
Specific Heat	BTU/lb °F	0.45	
Physical Form		Clear Liquid	

<sup>1</sup> Pensky-Martins Closed Cup Method

# Processing/How to use

### **General Information**

EPON Resin 8132 can be cured or cross-linked with a variety of curing agents depending on properties desired in the finished product. A few commonly used curing agents, recommended concentrations, curing schedules employed and performance data are displayed in Table 1. The EPON Resin 8132 is also compared with EPON Resins 815 and 813, two other popular 100% reactive diluted liquid epoxy resins.

For additional performance characteristics information covering adhesives and wet lay-up laminating, consult brochure SC: 67, entitled, "EPON Resin Structural Reference Manual".

### **Performance Properties**

Table 1 / Typical properties of cured EPON™ Resin 8132 compared with those of EPON Resin 815 and EPON Resin 8131

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	Units	EPON Resin 8132	EPON Resin 815	EPON Resin 813
EPON Resin 8132	pbw	100		
EPON Resin 815	pbw		100	
EPON Resin 813	pbw			100
EPIKURE™ Curing Agent 3234 (TETA)	pbw	12	13	13
Handling Properties				
Pot life, 1/2 pint	minutes	136	67	94
Initial viscosity	сР	460	300	240
Cure schedule	hours/°F	4/77+2/302	4/77+2/302	4/77+2/302
Tensile properties, at 25 °C				
Ultimate strength	psi	7,800	9,800	9,500
Ultimate Elongation	%	5.3	5.0	2.0
Modulus	ksi	410	500	680
Flexural properties, at 25 °C				
Strength	psi	14,000	17,000	20,000
Modulus	ksi	420	510	620

Tg by DSC	°C (°F)	77 (171)	92 (198)	74 (165)
Chemical Resistance, % weight gain				
Acetone, 3 hours at (56 °C)	%	0.5	4.0	7.0
Water, 24 hours at 93 °C	%	3.0	3.0	3.0
<sup>1</sup> Reference SC: 1244				

#### **FDA Status**

EPON Resin 8132 is not listed under the Code of Federal Regulations (21 CFR) therefore, Resolution Performance Products LLC cannot recommend its use for food contact applications.

#### 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.

EPON Resin 8132 is normally shipped in bulk from 100 °F (43 °C) to 150 °F (66 °C) for ease of handling.

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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