

Starting Formulation

SF 7003

Rapid Curing Potting Compound

EPON™ Resin 828 / HELOXY™ Modifier 62 / EPIKURE™ Curing Agent 3271

Introduction This thermal shock resistant, epoxy compound is designed for potting preheated assemblies. It cures to handling strength in 2 to 3 minute cycles. Maximum properties, including 150 °C heat resistance, are achieved following a post cure of 60 minutes at 125 °C.

Formula	Material	Supplier	Pounds	Gallons
Resin Portion				
	EPON Resin 828	Hexion	83	8.60
	HELOXY Modifier 62	Hexion	17	1.87
	DC-200 Fluid, 100 centistroke grade	Dow-Corning Corp.	0.007	0.0001
	Novacite 325 Silica	Malvern Minerals	130	5.89
	1/16-inch Milled Glass with epoxy compatible finish	Owens-Corning Fiberglass	4	0.19
			234.007	16.551
Converter Portion				
	EPIKURE Curing Agent 3271	Hexion	11.4	1.33
	Aromatic Amine Eutectic ¹		7.6	0.81
			19.0	2.14

¹ A 60/40 blend of para, para'-diaminodiphenylmethane and metaphenylenediamine.

Compounding Procedure Resin Portion – Blend EPON Resin 828, HELOXY Modifier 62, and DC-200 air release agent to a homogeneous liquid under moderate speed agitation. Add the Novacite filler and milled glass and disperse thoroughly under high shear agitation.

Converter Portion – Preheat the aromatic amine eutectic to between 50 and 60 °C and agitate in the original container to redissolve any crystallized portion and restore the mixture to a homogeneous state. Combine with EPIKURE 3271 Curing Agent, blending under moderate speed agitation to a uniform composition. Store in tightly sealed metal or polyolefin plastic containers.

Potting Procedure Preheat the resin portion to 55 °C or higher for convenient pumping and handling. Proportion and mix the resin and converter in mechanical metering and dispensing equipment. The resin/converter ratio is 12.3:1 by weight and 7.7:1 by volume.

Preheat the mold cavity to 125 °C and fill with the mixed compound. Maintain the temperature for 2 to 3 minutes, then grind off any overflow. Post cure the units for 60 minutes at 125°C to develop maximum thermal and physical strength properties.

Generated: October 21, 2021
 Issue Date:
 Revision:

© 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.

Storage Recommendations regarding storage conditions can be obtained by visiting our web site at www.hexion.com

General Information

These are starting formulations and are not proven in the user's particular application but are simply meant to demonstrate the efficacy of the products and to assist in the development of the user's own formulation. It is the user's responsibility to fully-test and qualify the formulation, along with the ingredients, methods, applications or equipment identified herein ("Information"), by the user's knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Safety, Storage & Handling

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

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

Generated: October 21, 2021
Issue Date:
Revision:

® 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.