

PRODUCT DESCRIPTION

Hysol® GR17F is a green epoxy molding compound specifically formulated for use as an overmold for opto coupler devices. The primary function of this material is to reflect ambient light and to prevent the escape of internal light from the package. Because of its high glass transition temperature, relatively low coefficient of thermal expansion and excellent resin purity, GR17F yields finished devices that are free from the moisture resistance and thermal shock problems associated with other forms of encapsulation.

PROPERTIES OF UNCURED MATERIAL

Color	White
Filler Content, %	70
Hot Plate Gel Time @ 175°C, seconds	23
Spiral Flow, inchs @ 175°C	40
Hot Hardness, Shore-D@175°C,90s	80
Shelf Life @ 5°C, months	12

TYPICAL CURED PROPERTIES

All measurements taken at 25°C unless otherwise noted. All physical, electrical and analytical measurements taken on specimens cured for two minutes at 175°C with post cure of 6 hours at 175°C, unless otherwise specified.

Glass Transition Temperature, °C	180
Coefficient of Thermal Expansion, cm/cm/°C	
50-110°C, x 10 ⁻⁶	23
220-240°C, x 10 ⁻⁶	8
Specific Gravity	2.23
Flexural Strength, Kg/mm ²	10
Flexural Modulus, Kg/mm ²	1390
UL94 Flammability @ 1/4"	V-0

HANDLING

GR17F has been formulated to provide the best possible moldability and as wide a molding latitude as possible. Although molding and curing conditions will vary from situation to situation, recommended starting ranges are shown below.

Preheat Temperature, °C	80 - 95
Molding Temperature, °C	150 - 180
Molding Pressure, psi	500 - 1500
Cure Time, 1/8 inch section, seconds	
@ 150°C	75 - 90
@ 175°C	45 - 60
Post Cure Time @ 150°C, hours	2 - 4

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or their strong oxidizing materials.

NOT FOR PRODUCT SPECIFICATIONS
THE TECHNICAL INFORMATION CONTAINED HEREIN IS INTENDED AS REFERENCE ONLY. PLEASE CONTACT TECHNICAL SERVICE FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.

STORAGE

Powder Storage – Powder or performs should be stored at 5°C or below, in closed containers. After removal from cold storage, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination. The suggested waiting time for a standard 15 Kg carton box is 24 hours.

DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.