

LOCTITE HYSOL GR 530-IMP

December 2014

PRODUCT DESCRIPTION

LOCTITE HYSOL GR 530-IMP is a Green, semiconductor grade mold compound providing the following product characteristics:

Technology	Epoxy
Cure	Heat
Appearance	Black
Filler Type	Silica
Filler Weight, %	84.3
Application	Mold Compound
Target Package(s)	SOIC, TO, SMA
Product Benefits	- Green product - Low moisture absorption
Flammability Rating	UL 94 V0 @ 1/8 inch thickness

LOCTITE HYSOL GR 530-IMP green molding compound is designed for use in SOIC, high end TO and SMA packages.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Spiral Flow, @ 175°C, inches	42
Gel Time @ 175°C, seconds	30
Shelf Life @ 5°C, days	183
Specific Gravity, g/cm ³	1.94

TYPICAL PROCESS DATA

Handling

Preheat Temperature, °C	70 to 90
Molding Temperature, °C	170 to 190
Transfer Pressure, Kg/cm ²	40 to 85
Transfer Time, automold, seconds	5 to 15
Hot Hardness, Shore D @ 175 °C, after 90 seconds	81
Curing Time, seconds	70 to 120
Post Mold Cure @ 175 °C, hours	4 to 8

LOCTITE HYSOL GR 530-IMP 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 above.

Please contact Henkel Technical Service for alternative process parameters if needed.

TYPICAL PROPERTIES OF CURED MATERIAL

All measurements are taken at 175°C, unless otherwise noted.

All physical, electrical and analytical measurements are taken on specimens cured for 140 seconds @ 175°C with post cure of 6 hours @ 175°C, unless otherwise specified.

Physical Properties

Glass Transition Temperature (Tg) by DMA, °C	138
Coefficient of Thermal Expansion, TMA, ppm/°C:	
Below Tg	10
Above Tg	40
DMA Modulus:	
@ 25 °C	N/mm ² 22,355 (psi) (3,242,320)
@ 175 °C	N/mm ² 1,325 (psi) (192,175)
@ 260 °C	N/mm ² 1,031 (psi) (149,533)
Moisture Absorption, 24 hours PCT, %	0.3

Application Specific Properties

Extractable Ionic Content, after 20 hours extract, ppm:	
Chloride (Cl-)	5
Sodium (Na+)	3.6

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 other strong oxidizing materials.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Mold Compound materials 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.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} = \text{N/mm}^2$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Reference 0.0

SFG Code : 1979099

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