

LOCTITE EO7029

January 2014

PRODUCT DESCRIPTION

LOCTITE EO7029 provides the following product characteristics:

Technology	Epoxy
Appearance	Beige
Product Benefits	<ul style="list-style-type: none"> One component Fast cure at moderate temperatures
Cure	Heat cure
Application	Encapsulant, Coating
Typical Assembly Applications	Smart card applications

LOCTITE EO7029 encapsulant is formulated for use in smart card applications. The thixotropic property of this material is designed to avoid flow during cure.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25 °C, mPa·s (cP):

Spindle 6, speed 50 rpm,	13,000
Spindle 6, speed 5 rpm	48,000

Specific Gravity @ 25°C, g/cm³ 1.2

Shelf Life @ -20°C (from date of manufacture), months 6

Gel Time:

@ 100°C, minutes	13
@ 110°C, minutes	7

Flash Point - See SDS

The criteria for the extinction of shelf life is a change of >10% in the thixotropic index.

TYPICAL CURING PERFORMANCE

Recommended Cure When Used on

Robust non-stress sensitive components	5min @ 150°C
Stress sensitive components	1hour @ 120°C

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Glass Transition Temperature (T_g) by TMA, °C 110

Coefficient of Linear Thermal Expansion, TMA, ppm/°C:

Alpha 1, 40 to 80 °C	66
Alpha 2, 140 to 200 °C	181

Hardness, , Shore D, DIN 53505, Minimum 80

GENERAL INFORMATION

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

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.

THAWING:

1. Allow container to reach room temperature before use.

DIRECTIONS FOR USE

1. LOCTITE EO7029 should not be used for potting or globbing masses larger than 1 gram when curing at more than 120°C. Severe exotherm may occur and can cause bubble formation, craters on the surface, smoke and high shrinkage.
2. Mix thoroughly before use. Heating to 40°C will lower the viscosity and aid in mixing and pouring (the viscosity will remain the same for a few hours).

Storage

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

Optimal Storage : -20 °C

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

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa = N/mm²
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

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Reference 0.1