

LOCTITE[®] ECCOBOND DP 1031

February 2023

PRODUCT DESCRIPTION

LOCTITE[®] ECCOBOND DP 1031 provides the following product characteristics:

Technology	Epoxy
Appearance	Light brown liquid
Cure	Heat Cure
Product Benefits	<ul style="list-style-type: none"> • Non-conductive • One component • Fast cure • Low temperature cure • Good adhesion • Low bleed
Application	Digital printing, Structural adhesive, Component Assembly Adhesives

LOCTITE[®] ECCOBOND DP 1031 fast and low temperature cure adhesive is formulated for use in digital printing applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield CP51 - Cone & Plate, 25 °C, Pa·s:	
@ Speed 10 rpm	9.0
Specific Gravity @ 25 °C, g/cm ³	1.13
Shelf Life @ -40°C, days	180

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

60 minutes @ 120°C

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

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 60 minutes @ 120°C

Physical Properties

Glass Transition Temperature, °C:	
(T _g) by DMA	113
(T _g) by TMA	97
Coefficient of Linear Thermal Expansion, ppm/°C:	
Below T _g	63
Above T _g	177
DMA Modulus @ 25°C, GPa	3.2

Adhesion Properties

Die Shear Strength, 2 x 2 mm Si die:

on Alloy 42, MPa	36
on SUS 304, MPa	55

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. After removing from freezer, set the syringes to stand vertically while thawing..
2. Thawed adhesive should immediately be placed on dispense equipment for use.
3. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminations and/or air into the adhesive.
4. Adhesive must be completely used within the products recommended work life.
5. Freeze-thaw voids can form in the syringes if the syringes are repeatedly thawed and refrozen.

STORAGE

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

Optimal Storage : -40 °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 Henkel Representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb/F}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{N/mm}^2 = \text{MPa}$

$N \cdot m \times 8.851 = lb \cdot in$
 $N \cdot m \times 0.738 = lb \cdot ft$
 $N \cdot mm \times 0.142 = oz \cdot in$
 $mPa \cdot s = cP$

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Reference 1