

LOCTITE® HHD 3605

March 2021

PRODUCT DESCRIPTION

LOCTITE® HHD 3605 provides the following product characteristics:

Technology	Polyurethane Hot Melt
Appearance	Colorless to amber solid
Solids Content, %	100
Components	One part - requires no mixing
Cure	Solidification and Moisture
Application	Device assembly, Structural bonding

LOCTITE® HHD 3605 is a reactive hotmelt adhesive formulated to cure with moisture. This material is pressure sensitive, providing instant high initial strength and fast speed of set. Additionally it has excellent impact resistance, good basic bonding performance and suitable open time for automatic or manual assembly line.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield - Thermosel, 110 °C, mPa·s (cP):

Spindle 27 4,250

Density @ 25°C ±0.05, g/cm³ 1.1

Shelf Life - Refer to package label for proper storage condition

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Preheating Schedule 20 to 30 mins @ 100°C

Application Temperature, °C 100 to 110

LOCTITE® HHD 3605 cures exclusively by moisture and gains its final strength in 1-5 days. This material, however, exhibits high handling strength instantly after bonding.

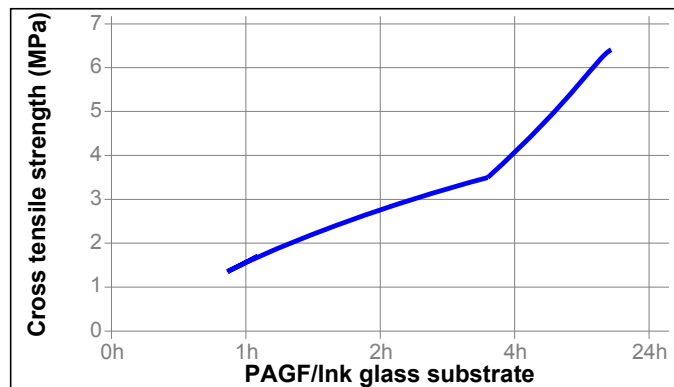
Curing is a chemical reaction depending on the following parameters:

- Humidity in the rooms of application and storage
- Moisture content on the substrates
- Permeability of the substrates to be bonded
- Application volume / layer of the adhesive film

The above cure profile is a guideline recommendation. These 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.

Curing curve on PAGF/Ink glass



TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Elongation, %	836
Modulus	N/mm² 63 (psi) (9,140)

TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 7 days @ 22°C.

Miscellaneous

Tensile Strength, PAGF/Ink glass	N/mm² ≥4 (psi) (580)
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GENERAL INFORMATION

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

Pretreatment:

1. The bonding surfaces must be clean, dry and free of oil and grease.
2. Substrate temperature should not fall below 20°C during

application.

3. Lower temperatures will lead to early solidification of the adhesive and to a reduced open time, the adhesive might even flake off.
4. The substrates may be preheated if necessary.

Application:

1. LOCTITE® HHD 3605 can be applied from heating cartridge guns, from usual syringe type melting equipment.
2. At longer rest periods, melting and application temperatures should be decreased. Longer exposure to higher temperatures can lead to a viscosity increase.

Storage

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

Optimal Storage : Refer to package label for proper storage condition.

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 quality department for assistance and recommendations on specifications for this product.

Conversions

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

Disclaimer

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