

LOCTITE® HHD 7529

September 2023

Product description

LOCTITE® HHD 7529 provides the following product characteristics:

Technology	Water-based polyurethane
Appearance	White liquid
Cure	Heat dry followed by room temperature cure
Application	Structural bonding; Electronic structural bonding; Device assembly

LOCTITE® HHD 7529 water-based polyurethane adhesive is formulated for use in a wide variety of assembly applications from fabric to consumer electronic parts and devices. This material may be applied by spraying, dispensing or brushing. LOCTITE® HHD 7529 delivers its best performance when used with LOCTITE® HHD 7520H or LOCTITE® HHD 7520HL hardener.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield RV Rheometer, 25°C, mPa.s (cP)	
Spindle 4, speed 20 rpm	5,270
Shelf life at 5 to 36°C, days	180
Solid content, %	51.2
pH	6.76

TYPICAL CURING PERFORMANCE

Cure schedule

Dry 5 to 10 minutes @ 40 to 60°C then allow to cool down.
Follow with heat press 0.2 to 0.5 N/mm² @ 70 to 105°C for 20 to 60 seconds.

1 to 3 days curing is recommended before evaluating performance.

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.

GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

Directions for use:

Preparation

1. Surface should be dry, without dust, oil, grease or other impurities.
2. Product should be stirred before use to prevent color separation.

Preparation if used with hardener

1. The recommended mix ratio of LOCTITE® HHD 7529 resin and LOCTITE® HHD 7520H hardener is 100:5 to 100:10 by weight.
2. Mix LOCTITE® HHD 7529 resin and LOCTITE® HHD 7520H hardener by agitation or manual stirring.

Spraying

1. LOCTITE® HHD 7529 can be sprayed using spray guns.
2. For porous materials, it is recommended to spray the surface of both two pre-bonded materials.
3. Recommended dry thickness is 40 ~ 100 µm.

Assembly

1. The sprayed layer is recommended to be dried at 40 to 60°C.
2. Sprayed parts should be allowed to cool before subjecting to heat press.
3. Heat press sprayed assembled parts at 70 to 105°C. Recommended pressing pressure is 0.2 to 0.5 MPa for 20 to 60 seconds.

Cleaning

Uncured adhesive in spray equipment can be cleaned using deionized water.

Packaging

LOCTITE® HHD 7529 is supplied in 20 kg plastic pail.

Storage

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

Optimal storage: 5 to 36°C. Storage below 5°C or above 36°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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 the specifications of this product.

Conversions

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

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