



Loctite® H3500

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PRODUCT DESCRIPTION

LOCTITE® H3500 is two-component acrylic adhesive system designed to provide high strength, durable bonds on various metals and plastics.

TYPICAL APPLICATIONS

LOCTITE® H3500 is a non-sag, two component, room temperature curing methacrylate adhesive system. LOCTITE® H3500 is designed to have fast fixture and high strength on a variety of substrates, especially aluminum and aluminum alloys. This product also has high impact strength and maintains strength over a wide temperature range.

PROPERTIES OF UNCURED MATERIAL

Typical Uncured Properties	Part A	Part B	Mixed
Open Time @ 70°F	-	-	7-9min
Fixture Time @ 70°F	-	-	18-20min
Color	Off white	Light Yellow	Light Yellow
Viscosity, cP	29,000	18,000	9846
Specific Gravity	1.03	0.95	0.989
Mix Ratio: By Weight			1:1
By Volume			1:1

Physical Properties

Cured at 22C for 24hrs.

Property	Typical Value
Tensile strength, ASTM D882, psi (N/mm ²)	3676
Modulus, ASTM D882, N/mm ² (psi)	156086
Hardness (Shore D)	79
Volume Shrinkage, %	18.7
Linear Shrinking, %	6.7
Elongation, at break, ISO 527-2, %	5.75
Elongation, at yield, ISO 527-2, %	3.18
Glass Transition Temperature (Tg)	104
Peak Exotherm Time, 10g mass	20
Peak Temperature, °C	157

Property	Typical Value
Lap Shear Strength, Polycarbonate (psi)	1,200
Lap Shear Strength, Aluminum (psi)	2,000
Lap Shear Strength, ground Steel (psi)	3,200
Lap Shear Strength, Aluminum to Polycarbonate (psi)	1,000
T-Peel Strength, Aluminum to Aluminum (lb/in)	190

Hot Strength

Cured at 22C for 24hrs.

Property	Typical Value
Lap Shear Strength, Aluminum to Aluminum (psi) @ 60C	1,600
Lap Shear Strength, Aluminum to Polycarbonate (psi) @ 60C	770
Lap Shear Strength, Aluminum to Aluminum (psi) @ 80C	1,600
Lap Shear Strength, Aluminum to Polycarbonate (psi) @ 80C	740

USE AND APPLICATION

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.

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

Storage

Store product in cool, dry location, in unopened containers at a temperature between 8°C and 28°C (26°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact Application Engineering at (860) 571-5100.

Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

Note

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**Loctite Industrial**

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