

Description

Loctite® AA H4100 is a non-sagging, two component, room temperature curing, 10:1 mix ratio, methacrylate adhesive system. Loctite® AA H4100 is formulated to provide handling strength within minutes. Loctite® AA H4100 provides greater versatility when used in aesthetic bonding applications. This adhesive forms resilient bonds and maintains its strength over a wide range of temperatures. Loctite® AA H4100 is suitable for bonding a variety of substrates with a minimum of surface preparation.

Recommended Substrates: PVC, polycarbonate, acrylic, epoxy coated metal, ABS, stainless steel and FRP

Features

- Non-sagging gaps filled to .375 inch
- Superior impact and peel strength
- Little or no surface preparation
- Offers excellent tolerance to off-ratio mixing
- Rapid room temperature cure
- 100% reactive
- Excellent environmental resistance

Typical Cured Properties	Typical Value
Tensile Strength, psi, ASTM D 638	4100 to 4300
Elongation, %, ASTM D 638	20 to 30
Hardness, Shore D	75 to 80

Typical Uncured Properties	Part A	Part B	Mixed
Open Time @ 70°F, mins	--	--	2 to 4
Fixture Time @ 70°F, mins	--	--	7 to 8
Color	Cream	Tan	Pale Yellow
Viscosity, cP	90,000 to 100,000	140,000 to 150,000	--
Specific Gravity	1.02	1.06	1.02
Weight per Gallon, Lbs	8.50	8.83	8.53
Mix Ratio			
By weight	9.6	1	--
By volume	10	1	--

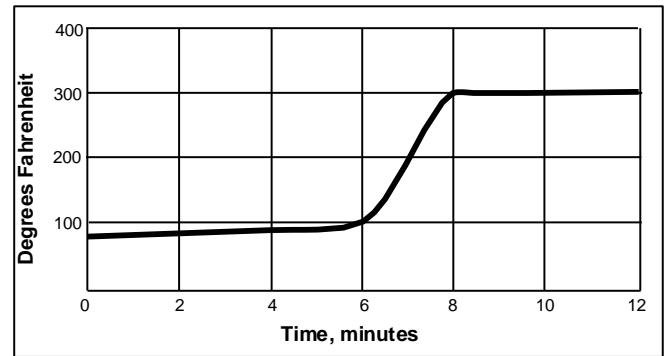
Typical Cured properties	
Shear Strength, psi, ASTM D1002	Typical Value
Steel	3140
Stainless Steel	2200
Zinc Dichromate	1180
Anodized Aluminum	2850
Polycarbonate	1220
Fiberglass	>1730
Gelcoat	>1400

Side Impact Strength, kJ/m ² , GM9751P test	Typical value
Aluminum	5 to 10

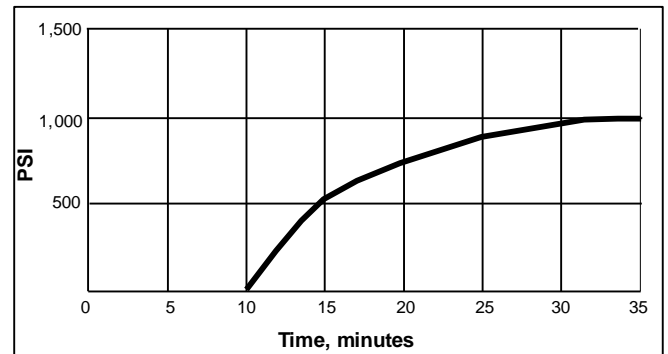
Block Shear, ASTM D4501, psi	Typical Value
PVC	2850
ABS	2270

T-peel, pli, ASTM D1876	Typical Value
Steel	5
Aluminum	10 to 15

Peak Exotherm Curve –10 Gram Mass



Development of Bond Strength Strength Build on FRP



GENERAL INFORMATION

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).

Handling and Application

Mixing: It is highly recommended that either meter mix equipment or cartridges with static mix nozzles be used to properly ratio and dispense the adhesive. For hand mixing, combine Part A and Part B in the correct ratio and mix thoroughly. Once mixed, H4100 should achieve a uniform color. This is important! Heat buildup during and after mixing is normal. To reduce the likelihood of smaller amounts will minimize heat buildup.

Applying: Bonding surfaces should be clean, dry, and free of contamination. Extensive surface preparation is not required for H4100, and good bonds can be formed on most substrates after a solvent wipe. To assure maximum bond strength, surfaces must be mated within the adhesive's open time. Use enough material to completely fill the joint when parts are clamped.

Curing: Parts should remain undisturbed during the interval of time between the material's open time and fixture time. After the fixture time is achieved the material has reached handling strength. Temperature below 55°F will slow the cure; above 85°F will accelerate cure rate.

Clean Up: It is important to clean up excess adhesive from work area and application equipment before it hardens. Denatured alcohol and many common industrial solvents are suitable for removing uncured adhesive. Speedbonder H4100 is flammable. Keep containers tightly closed after use. Keep away from heat, sparks, and open flames.

Storage

Speedbonder adhesives should be stored in unopened containers in a dry location at 40°F +/- 5 F. For further specific shelf life information, contact your local Technical Service Center.

Note

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