



Product 3060

July, 2007

PRODUCT DESCRIPTION

LOCTITE® Product 3060 is two-component methacrylate adhesive system designed for structural bonding of magnets in the assembly of fractional horsepower electric motors. It may also be used for structural bonding of metals.

TYPICAL APPLICATIONS

Bonding of ferrite and rare earth magnets to metal rotors and stators as well as structural bonding of metals.

PROPERTIES OF UNCURED MATERIAL

Typical Uncured Properties	Part A	Part B	Mixed
Color	Pale yellow	Blue-green	Green-blue
Viscosity, cP, cone & plate viscometer, 20mm, 10 s ⁻¹	10,000	7,000	

PROPERTIES OF CURING MATERIAL

Typical Properties	Ratio by Weight		
	Part A	Part B	Mixed (s)
Open Time @ 70°F, s	1	1	150 to 180
	2	1	150 to 180
	1	2	>180
Fixture Time @ 70°F, no gap (s)	1	1	90 to 105
	1	2	105 to 120
	2	1	60 to 75
Fixture Time @ 70°F, 0.010" gap (s)	1	1	160 to 170
Mix Ratio Range: By Weight (A:B)			1:2 to 2:1
By Volume (A:B)			1:2 to 2:1

TYPICAL PROPERTIES OF CURED MATERIAL

Cured 48 hours at room temperature

Property	Typical Value
Lap Shear Strength, ASTM D1002 (psi)	
Steel	3500 to 3700
Steel (0.01" gap)	2700 to 3200
Steel @ 150 C	460 to 480
Steel after 10 days at 120 F/100% RH	2500 to 2700
Aluminum	2500 to 2800
Zinc Dichromate	1500 to 2200
Zinc Galvanized	1200 to 1500
Block Shear Strength, ASTM D4501 (psi)	
Ferrite to steel	>2250
Side Impact Strength, steel, [J/in ²]	>13

USE AND APPLICATION

Product 3060 is typically applied via an external mix dispensing system. This system consists of two dispense tips that are positioned such that when product is dispensed, the two components mix in the air as the adhesive falls on the part. Minimum height of the dispense tips above the part is 6". Optimal dispense angle (from horizontal) of dispense valve is 60°. The product will cure when the mix ratio is between 1:2 and 2:1 parts A:B. However, the affect on cure speed and ultimate strength must be verified. Static mix tips are not needed to adequately mix Product 3060.

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. The shelf life is approximately 6 months at room temperature. To prolong shelf life storage at refrigerated conditions (2 to 8 C) is recommended. 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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