PRODUCT INFORMATION

LORD Engineered Adhesives

7500

Two-Component, High-Performance, Urethane Adhesive

Description

Lord® 7500A/B and Lord 7500A/C are two-part, urethane adhesives used to bond a wide variety of plastics, metals and elastomers. Lord 7500A/B adhesive and Lord 7500A/C urethane adhesive cure at room temperature, or can be accelerated with heat.

Features and Benefits

Primerless Adhesion - reduces material and labor cost by eliminating the need to prime many difficult to bond plastics.

Contains No Solvent - safer for workers. Does not require expensive hood systems or explosion-proof equipment. Will not deplete the ozone.

Variable Cure - cures completely at room temperature or more rapidly with heat.

Impact Resistant - provides impact resistance at temperatures ranging from -34°C to 116°C (-30°F to 240°F).

Environmental Resistance - resists sunlight, weathering, humidity and salt spray.

Surface Preparation

Prior to bonding, parts should be clean, dry and free from oil contamination. Cleaning with an organic solvent is usually sufficient. Adhesion can be enhanced by mechanical abrasion of the surface, although it is not always required.

For bonding rubber, use Lord 7701 surface treatment on the rubber surface before joining. For bonding glass, use Lord 7715 primer.

Mixing

Lord 7500A resin should be mixed with Lord 7500B or 7500C at the proper mix ratio.

Lord 7500A/B adhesive offers a working time of approximately 20-30 minutes and handling strength in about 24 hours.

Lord 7500A/C adhesive offers a working time of approximately 6-10 minutes and handling strength in about one hour.

Table 1: Typical Properties* of Lord 7500 Adhesive System

	Lord 7500A	Lord 7500B	Lord 7500C
Appearance	Beige	Black	Black
Density lb/gal	11.9 ± 0.3%	10.0 ± 0.3%	10.0 ± 0.3%
Mix Ratio			
by weight	1.7	1	1
by volume	1.4	1	1
Viscosity, cP Brookfield HAT @ 25°C (72°F)	70,000 - 250,000	1,000,000 - 6,000,000	1,000,000 - 6,000,000
Flash Point (closed cup)	>93°C (>200°F)	>93°C (>200°F)	>93°C (>200°F)
Working Time	-	20 - 30 minutes	6 - 10 minutes
Percent Reactive Solids	100%	100%	100%
Shelf Life, from date of shipment, unopened container, storage 21°C-27°C (70°F - 80°F)	6 months	12 months	12 months

*Data is typical and not to be used for specification purposes.

Table 2: Typical Peel Strength of Lord 7500 Adhesive on Rubber Treated with Lord 7701 Surface Treatment

	Natural	Neoprene	SBR
Initial	29 pli RT	22 pli RT	63 pli RT
2 Wks. in 5% Salt Spray	27 pli RT	27 pli RT	64 pli RT

Bonding Parameters: Glue Line - 0.010-in., Cure Cycle - 15 min. @ 116°C (240°F), Test - Peel X 2-in./min.
Codes: RT - Rubber Tear, pli - lbs per linear inch

Table 3: Typical Peel Strength of Lord 7500 Adhesive

	Ambient	2 Wks. 100 F, 100% RH	2 Wks. Salt Spray
SAE 1010 CRS[1]	2400 psi COH	2350 psi COH	1240 psi COH
CQ 1010 CRS[1]	2540 psi COH	2000 psi COH	2100 psi COH
6061 - T6 Al[1]	2130 psi COH	1540 psi COH	1640 psi COH
Lexan 141 111[2]	1140 lbs. SB	1150 lbs. SB	1130 lbs. SB
Lexan LS-2[2]	1070 lbs. SB	1110 lbs. SB	1100 lbs. SB
Xenoy 1101[2]	920 lbs. SB	660 lbs. SB	640 lbs. SB
RRIM-Mobay[2]	420 lbs. SB	400 lbs. SB	370 lbs. SB
RRIM-Union Carbide[3]	500 lsb. SB	420 lbs. SB	360 lbs. SB
RRIM-Dow[2]			
With IMR	727 lbs. SB	590 lbs. SB	670 lbs. SB
No IMR	530 lbs. SB	520 lbs. SB	535 lbs. SB
ABS[2]	570 lbs. SB	560 lbs. SB	500 lbs. SB
SMC-Budd A-2000[4]	720 psi FT	680 psi FT	670 psi FT
GTR 7101[4]	713 psi FT	550 psi FT	630 psi FT
Nylon 66[2]	400 lbs. SB	385 psi SB	400 lbs. SB

Bonding Parameters: Cure - 15 min. @ 93°C (200°F), Overlap - 1/2 inch, Glue Line - 0.020 inch.
Codes: COH - cohesive, SB - Stock Break, FT - Fiber Tear, psi - lbs./in^2
Substrate Preparation: [1]Grit blasted + MEK or IPA wipe/Chemlok 7711 Primer,
[2]Dry rag wipe,
[3]MEK wipe,
[4]Scuff with 3M Pad + MEK wipe

Values stated in this bulletin represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Service Department.

Information provided herein is based upon tests believed to be reliable. Inasmuch as Lord Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, Lord Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party including but not limited to any product end user. Nor does the company make any express or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use.

Lord is a registered trademark of Lord Techmark, Inc., a subsidiary of Lord Corporation.
©Lord Corporation Printed in USA DS3438 (Rev. 3 7/04)

Cautionary Information

Before using this or any Lord product, refer to the Material Safety Data Sheet (MSDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

For information, contact Bergdahl Associates, Inc.
2990 Sutro Street
Reno, Nevada 89512-1616
775-323-7542 fax 775-323-7595

LORD