

# LORD<sup>®</sup> 7100 and 7150 Urethane Adhesives

# Description

LORD® 7100 and 7150 adhesives are two-part, high strength urethane adhesives used to bond cloth, paper, plastics, foams, rubber, painted metals and powder coated metals. LORD 7100-A and 7150-A resins are composed of isocvanate. LORD 7100-B and 7150-B curatives are composed of polyol.

These adhesives can be either room temperature cured or heat cured for faster processing. LORD 7100 adhesive cures to a glossy black appearance; LORD 7150 adhesive cures to a unique gray color.

### Features and Benefits

Convenient - reduces material and labor costs by eliminating the need to prime many plastics.

Durable - creates high strength bonds to plastics without crazing, attacking or lowering the strength of the plastic substrate.

Non-Flammable - does not require explosion-proof equipment.

Environmentally Friendly - no VOC content; does not contain ozone depleting chemicals.

Chemically Resistant - solvent resistant when cured.

# **Typical Properties\***

Environmentally Resistant - resists weathering and aging.

# Application

Surface Preparation - Surfaces should be free of grease, dirt and other contaminants. For most plastics, clean the surface with a dry rag wipe or a rag dampened with solvent. For metals, grit blast and solvent wash the surface, then prime for optimum bond performance.

*Mixing* – Mix resin with the appropriate curative at a 1:2 ratio, by volume. Handheld cartridges will automatically dispense the correct volumeric ratio of each component. Once mixed, the adhesive cures rapidly.

Applying - Apply adhesive using handheld cartridges or automatic meter/mix/dispense equipment.

- Handheld Cartridges
  - 1. Load the cartridge into the applicator gun and remove the end caps.
  - 2. Level the plungers by expelling a small amount of adhesive to ensure both sides are level.
  - 3. Attach mixing tip and expel a mixer's length of adhesive.
  - 4. Apply adhesive to substrate and mate the parts within the working time of the adhesive. Clamp in position until adhesive reaches handling strength.

Appearance Black Liquid Black Liquid Viscosity, cP @ 75°F (24°C) 3000-16,000 45,000-72,000 Brookfield LVT Brookfield HA Spindle 4, 30 rpm Spindle 6, 20 rpm Density lb/gal 12.4-12.7 10.9-11.4 (1486 - 1522)(1306 - 1366) $(kg/m^3)$ Flash Point (Closed Cup), °F (°C) >200 (>93) >200 (>93)

7100-A Resin

7100-B Curative

7150-A Resin Black Liquid 3000-16,000 Brookfield LVT Spindle 4, 30 rpm

12.4-12.7 (1486 - 1522)>200 (>93)

7150-B Curative

White Liquid 41,500-65,500 Brookfield HA Spindle 6, 20 rpm

10.9-11.4 (1306 - 1366)>200 (>93)

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

# LORD TECHNICAL DATA

 Meter/Mix/Dispense Equipment Contact your LORD representative if assistance is needed using this equipment.

*Curing* – LORD 7100 and 7150 adhesives will cure to full strength in 24 hours at room temperature, 77°F (25°C). Cure rate can be accelerated when adhesive is cured at elevated temperatures.

*Cleanup* – Remove adhesive squeeze-out with a dry knife blade or similar device when the adhesive begins to harden. Take care to avoid disrupting the bondline.

### Shelf Life/Storage

Shelf life is six months when stored at temperatures under 80°F (27°C) in original, unopened container. For maximum shelf life, storage temperatures of 40-50°F (4-10°C) are recommended. If stored at these cooler temperatures, allow product to return to room temperature before using.

After opening, protect adhesive from excessive exposure to moisture by installing desiccant cartridges and/or using dry nitrogen as an inert cover.

# **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.

#### **Typical Properties\* of Resin Mixed with Curative**

	7100-A/B	7150-A/B
Mix Ratio, Resin to Curative		
by Volume	1:2	1:2
by Weight	1:1.78	1:1.78
Solids Content by Weight, %	100	100
Working Time, min @ 77°F (25°C)	5-10	5-10
Purge Time, min @ 77°F (25°C)	3	3
Time to Handling Strength, hr @ 73°F (23°C)	2-3	2-3

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

Values stated in this technical data sheet 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 Support Center.

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