

LORD® 850 and 852 Toughened Structural Acrylic Adhesives with LORD Accelerator 25GB



# **Specifically Formulated to Provide High Impact and Fatigue Resistance!**



#### **Features & Benefits**

indirect UV exposure.

**Versatile** – bonds a wide range of unprepared metals with minimal substrate preparation, as well as polymer composite substrates such as FRP. **Durable** – provides high strength for high-end structural bonding applications; 100% elongation improves impact strength and fatigue resistance. **Temperature Resistant** – performs at temperatures from -40°F to +300°F (-40°C to +149°C); tolerates e-coat bake with cohesive failure at 338°F (170°C). **Environmentally Resistant** – resists dilute acids, alkalis, solvents, greases, oils, moisture, salt spray and weathering; provides excellent resistance to

**Non-Sag** – remains in position when applied on vertical or overhead surfaces, allowing for greater process flexibility.

\*SUBSTRATES: Cold Rolled Steel, Aluminum, Hot Dipped Galvanized (HDG) Electro-Galvanized Steel (EGS), Fiber Reinforced Plastic (FRP) and Acrylonitrile Butadiene Styrene (ABS).
\*All substrates should be tested to validate performance for specific applications

**APPLICATIONS:** Replacing mechanical fastening in joint designs where high peel, improve impact and fatigue resistance are desired.



Elevator Assembly

Commercial Vehicle Assembly

Trailer Assembly

## **TYPICAL PROPERTIES\***

Viscosity (Brookfield), cP @ 77°F (25°C)	100,000-500,000
Flash Point, °F (°C)	59 (15)
Density	
lb/gal	8.00-8.30
(kg/m³)	(959-995)

<sup>\*</sup>Data is typical and not to be used for specification purposes.

# TYPICAL PROPERTIES\* of Adhesive Mixed with Recommended Accelerator

	850/25GB	852/25GB
Mix Ratio by Volume, Adhesive to Accelerator	10:1	10:1
Solids Content, %	100	100
Working Time, min @ 75°F (24°C)	6-10	20-25
Time to Handling Strength (50 psi Shear), min @ 75°F (24°C)	18-24	50-70
Full Cure Time, hr @ 75°F (24°C)	2**	5

<sup>\*</sup>Data is typical and not to be used for specification purposes.

## **TECHNICAL DATA\***

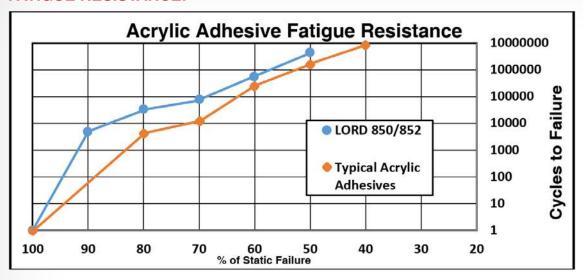
	850/25GB	852/25GB
Hardness (Shore D)	66	67
Tensile Strength at Break, psi (MPa) (ASTM D638, modified)	2610 (18.0)	2683 (18.5)
Elongation, % (ASTM D638, modified)	100	100
Young's Modulus, psi (MPa) (ASTM D638, modified)	105,000 (724)	125,000 (862)
Glass Transition Temperature (TG), °F (°C) (ASTM E1640-99, by DMA)	176 (80)	178 (81)

<sup>\*</sup>Data is typical and not to be used for specification purposes.

Part #	Description	Cartridge Size	Case Qty	Ratio	Case Weight (lbs)
3025353	LORD 850/25GB Fast	490 mL	12	10:1	19.3
3025352	LORD 850/25GB Fast	250 mL	12	10:1	14.1
3025363	LORD 852/25GB Slow	490 mL	12	10:1	19.3
3025362	LORD 852/25GB Slow	250 mL	12	10:1	14.1
3025382	MIXER	250/490 mL	12		0.6
3004276	LORD-Pak 400 mL				
3018302	LORD-Pak 200/400 mL				

<sup>\*\*</sup>Reaches 90% of its full strength after 1 hour.

#### **FATIGUE RESISTANCE:**



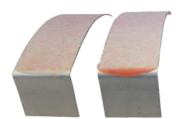
High Fatigue resistance, along with distribution of stress, is a significant advantage provided by adhesives compared to riveting and welding.

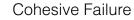
#### **IMPACT RESISTANCE:**

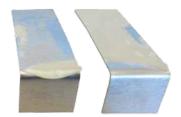




# **EXCELLENT COHESIVE FAILURE MODE:**







Adhesive Failure

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide ... Ask Us How.

LORD Corporation
World Headquarters

111 Lord Drive Cary, NC 27511-7923 USA

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com.

