LORD® 850 and 852 Toughened Structural Acrylic Adhesives

with LORD Accelerator 25GB

Parker Lord

ENGINEERING YOUR SUCCESS.

Specifically Formulated to Provide High Impact and Fatigue Resistance

Features & Benefits:

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).

Note: Based on test results, LORD 850/25GB adhesive system exhibits post bake/powder coating temperature resistance up to 400°F (204°C) for 90 minutes. Customer specific substrates should always be evaluated for specific application performance.

Environmentally Resistant – resists dilute acids, alkalis, solvents, greases, oils, moisture, salt spray and weathering; provides excellent resistance to indirect UV exposure.

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, cP @ 77°F (25°C) Brookfield	150,000 - 550,000
Density, lb/gal (kg/m^3)	8.00 - 8.30 (959 - 995)
Flash Point, °F (°C)	59 (15)

*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 by Weight, %	100	100
Working Time, minutes @ 75°F (24°C)	6 - 10	20 - 25
Time to Handling Strength, minutes @ 75°F (24°C) 50 psi Shear	18 - 24	50 - 70
Full Cure Time, hours @ 75°F (24°C)	2**	5

*Data is typical and not to be used for specification purposes.
** Reaches 90% of its full strength after 1 hour.

Typical Cured Properties*

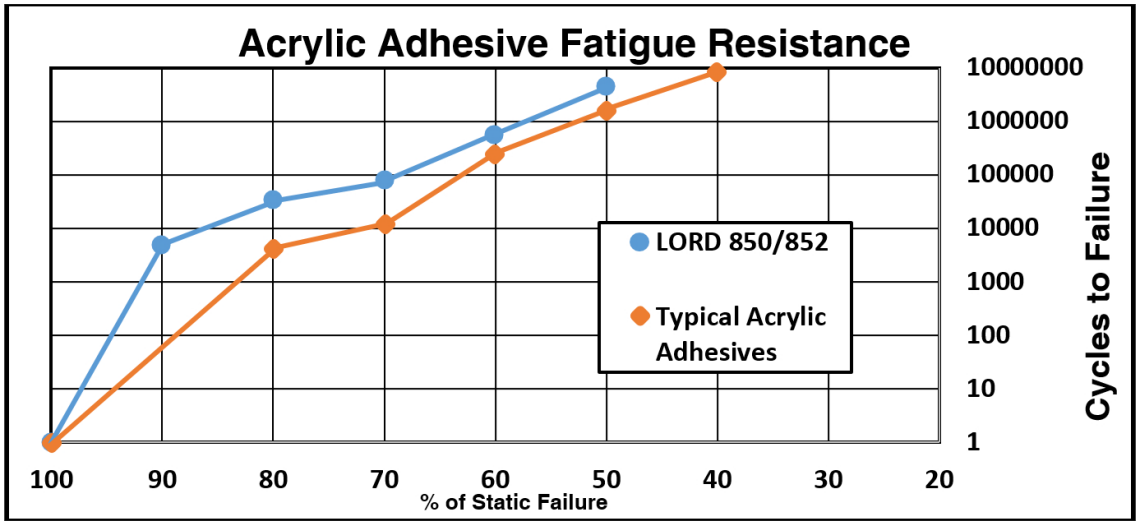
	850/25GB	852/25GB
Hardness, Shore D	66	67
Tensile Strength at Break, psi (MPa) ASTM D638, modified	2610 (18.0)	2638 (18.5)
Elongation, % ASTM D638, modified	100	100
Young's Modulus, psi (MPa) ASTM D638, modified	105,000 (724)	125,000 (862)
Glass Transition Temperature (Tg), °F (°C) ASTM E1640-99, by DMA	176 (80)	178 (81)

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

Part #	Description	Mix Ratio	Cartridge Size	Case Quantity	Case Weight
3025353	LORD 850/25GB Fast	10:1	490 mL	12	19.3 lbs
3025363	LORD 852/25GB Slow	10:1	490 mL	12	19.3 lbs
3029092	LORD 852/25GB Slow	10:1	50 mL	12	2.8 lbs
3004276	LORD-Pak 400 mL Manual Dispensing Gun	–	–	–	–
3025382	Mixing Tip	–	490 mL	12	0.6 lbs
3001112	LORD-Pak 50 mL Manual Dispensing Gun***	–	–	–	–
3031907	Plunger	10:1	50 mL	–	–
3031281	Mixing Tip	–	50 mL	12	

***LORD-Pak 50mL dispensing gun #3001112 ships with a 1:1/2:1 plunger.

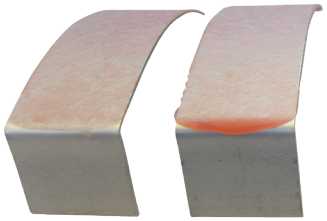
Fatigue Resistance:



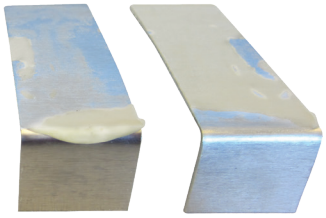
High Fatigue resistance, along with distribution of stress, is a significant advantage provided by adhesives compared to riveting and welding.

Impact Resistance:

Excellent Cohesive Failure Mode:



Cohesive Failure



Adhesive Failure

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