LORD[®] 7610DTM Direct-to-Metal Adhesive/Sealant

Technical Data Sheet

LORD[®] 7610DTM direct-to-metal adhesive/sealant is a single-component, moisture-cure product offering excellent adhesion to various substrates including many plastics, glass, concrete, wood and metals, especially precoated metals.

Features and Benefits:

Durable – creates high strength bonds, replacing mechanical fastening methods; exhibits excellent primerless adhesive properties.

Convenient – requires no mixing; cures quickly even at low temperatures; requires no ovens or other heat sources for curing.

Chemically Resistant – solvent resistant when cured. Painting and most cleaning processes do not affect bond strength.

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

Temperature Resistant – uncured material can endure 225°F (107°C) for 60 minutes, and cured material can endure 325°F (163°C) for 60 minutes with no negative effect.

Environmentally Resistant – resists weathering and aging; provides excellent resistance to indirect UV exposure.

Environmentally Recommended – low VOC content; contains no solvent.

Application:

Surface Preparation – Clean and dry surfaces prior to product application. Surfaces should be free of grease, dirt and other contaminants.

Applying – Using a handheld cartridge, apply LORD 7610DTM adhesive/sealant to substrate and mate the parts within the work time of the material. Do not allow the material to skin over before mating parts.

Curing – Through cure will vary depending on temperature and humidity. Product cures 1/8 inch every 24 hours at 77°F (25°C). Product thickness will determine full cure time. Product may be painted immediately with most industrial and consumer paints.

Note: Various paint chemistries may be not compatible with this product and must be qualified by the customer for their intended paint process.

Cleanup – Use isopropyl alcohol (IPA) to clean up adhesive. Once cured, any remaining adhesive can be removed mechanically.

Shelf Life/Storage:

Shelf life is 15 months when stored in a well ventilated area at or below 80°F (27°C) in original, unopened container. Once cartridge has been opened, leave the dispense tip on to act as a seal against moisture.

Typical Properties*		
Appearance	White Paste**	
Skin Time, minutes @ 77°F (25°C), 50% RH	15-45	
Work Time, minutes @ 77°F (25°C), 50% RH	25-35	
Time to Handling Strength, hours @ 77°F (25°C)	6-12	
Paint Time	Immediately and up to 30 days without a scuff	

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

**Other colors may be available.



Typical Cured Properties*		
Hardness Shore A	50	
Tensile Strength, psi (MPa)	200 (1.38) minimum	
Lap Shear Strength, psi (MPa)	200-500 (1.38-3.45)	
Elongation, % ASTM D412	400 minimum	

Cautionary Information:

Before using this or any Parker Lord product, refer to the Safety Data Sheet (SDS) 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.

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

Typical Bond Strengths**

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Substrates	Bond Strength, psi (MPa)	Failure Mode
Hot Dipped Galvanize (HDG)		
0.047"	439 (3.03)	C (95%)
0.047" & 80-grit Grind	400 (2.76)	C (98%)
Galvaneal		
0.029"	411 (2.83)	C (97%)
0.029" & 80-grit Grind	311 (2.14)	A (53%)
Cold Rolled Steel (CRS)		
0.030"	285 (1.96)	A (97%)
0.030" & 80-grit Grind	434 (3.00)	C (98%)
Aluminum (AL)		
0.034" 6022T6	157 (1.09)	A (99%)
0.034" 6022T6 & 80-grit Grind	393 (2.71)	C (90%)
Cromax 2580CR Scuffed on 0.030" CRS	498 (3.44)	C (100%)
Valspar VP50 Scuffed on 0.030" CRS	418 (2.88)	C (100%)
Polyester Paint on 19 Ga 3003 H16 AL	483 (3.33)	C (100%)

Failure Mode Definition	Abbreviation
Adhesive Failure	А
Cohesive Failure	С

***Bond strength data was obtained using LORD 7610DTM adhesive/sealant with 0.010" glass beads. Please contact Parker Lord regarding the use and/or performance of using other combinations (+1 877 275 5673).

Values stated in this document 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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