



LORD 648

Description

Lord 648 acrylic adhesive bonds a wide variety of prepared or unprepared metals and some plastics.

This adhesive contains a unique patented formula which provides exceptional bondability to metals as well as underbond corrosion protection.

Lord 648 adhesive is specifically formulated to provide reduced odor and increased flash point compared to other acrylic adhesives. Lord 648 adhesive replaces welding, brazing, riveting and other mechanical fastening methods even in low temperature environments subject to high impact or high peel loads.

Typical applications include; unprepared metals, aluminum, CRS, galvanized, stainless, copper, brass, etc.

Features and Benefits

Low Odor - reduces odor significantly.

Increased Flash Point - less flammable than many acrylic adhesives.

Bonds Unprepared Metal - requires little or no surface preparation on any metal, including oily surfaces.

Non-Sag - adhesive remains in position when applied on vertical or over-head surfaces, allowing for greater process flexibility.

Excellent Environmental Resistance - resists dilute acids, alkalis, solvents, greases, oils, moisture, and weathering. Provides excellent resistance to UV exposure.

Typical Properties* of Lord 648 Acrylic Adhesive

	Lord 648 Resin	Accelerator 19	Mixed
Appearance	Off-white	Off-white	Off-white, green at cure
Viscosity,cps Brookfield at 77 degrees F (25 C)	180,000 - 300,000	50,000 — 300,000	160,000 — 300,000
Density lbs/gal	9.3	11.9	9.8

Flash Point	115 degrees F (46 C)	>200 degrees F (>93 C)	NA
% Solids	100%	100%	100%
Mix Ratio By weight By volume	10 4	3 1	
Working Time At 75 degrees F (24 C)	NA	NA	8-12 Minutes
Handling Strength At 75 degrees F (24 C)	NA	NA	12-17 Minutes
Full Properties	NA	NA	2 hours
Shelf Life from date of shipment at 75 degrees F (24 C) unopened container	6 months	6 months	NA

Wide Temperature Range - withstands short term exposure at temperatures ranging from -40F to 302OF(-40C to 150C) without affecting adhesive performance.

Surface Preparation

Remove grease, loose contamination or poorly adhering oxides from metals. Normal amounts of mill oils and drawing compounds usually do not present problems in adhesion. Most plastics require a simple cleaning before bonding. Some may require abrading for best performance.

Mixing

Mix Lord 648 resin with Accelerator 19 at a mix ratio of 4: 1, by volume. Set the meter/mix/dispense equipment accordingly. Lord PAK cartridges will automatically mix and dispense the proper amount for each application. Once mixed, the acrylic adhesive cures rapidly and darkens from off-white to green.

Application

Apply using Lord PAK cartridges or by using automatic meter/mix/dispense equipment.

Lord PAK Cartridges

- Load the cartridge into the applicator gun and remove the end caps.
- Purge the cartridge by gunning a small amount of adhesive to ensure both sides are level.
- Attach mixing tip and gun out a mixer's length of adhesive.
- Apply adhesive to substrate, clamp and fixture until adhesive reaches handling strength.

Automatic meter/mix/dispense equipment- call your Lord representative if assistance is needed using this equipment.

Storage

For maximum shelf life, store Lord PAK cartridges, or Lord 648 resin containers, at temperatures 40F - 80F (4C - 27C). Protect from exposure to ultraviolet light. Keep away from open flame.

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

Packaging

- Lord PAK™ Cartridges
- 5 Gallon Pail

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.

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