

Supplied by

AMBERCOMPOSITES

403

Fast Set, Modified Acrylic Adhesive

Description

Lord® 403 acrylic adhesive bonds a wide variety of prepared or unprepared metals and engineered plastics. Lord 403 adhesive is specifically formulated to provide the highest impact and peel strengths available in a room temperature curing adhesive. Lord 403 adhesive replaces welding, brazing, riveting and other mechanical fastening methods especially in low temperature environments subject to high impact or high peel loads.

Features and Benefits

Non-Sag — remains non-sag when applied on vertical surfaces.

Exceptional Cold Temperature Strength – performs at temperatures from -40°F to 300°F (-40°C to 149°C).

Bonds Unprepared Metal — requires little or no substrate preparation.

Bonds Plastic — adheres difficult to bond plastics such as polycarbonate and XENOY®.

Excellent Environmental Resistance – resists dilute acids, alkalis, solvents, greases, oils, moisture, and weathering. This adhesive also provides excellent UV exposure resistance.

Typical Properties* of Lord 403 Acrylic Adhesive

	Lord 403	Accelerator #17	Accelerator #19
Appearance	Off -White to Tan Paste	Off-White	Off-White
Viscosity: (cps) Brookfield at 77°F (25°C)	100,000-300,000	10,000 - 100,000	150,000 – 450,000
Density: lbs/gal	9.1-9.7	9.6-10.4	11.9-12.9
Flash Point	59°F (12°C)	>200°F (>93°C)	>200°F (>93°C)
Mix Ratio			
by weight	10	1	3
by volume	10	1	2.5
Working Time @ 75°F (24°C)	2 - 4 min.	N/A	N/A
Handleable Bonds @ 75°F (24°C)	4 - 6 min.	N/A	N/A
Shelf Life from date of shipment, @ 75°F (24°C), unopened container.	6 Months	6 Months	6 Months

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

Surface Preparation

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

Mixing

Hand mix or apply with automatic meter/mix/dispense equipment. Mix Lord 403 resin with the proper amount of Mix-In accelerator. Once mixed, the acrylic adhesive cures rapidly.

Application

Apply to substrates and join.

Curing

The cure is completed in 24 hours at room temperature 77°F (25°C). The cure rate can be accelerated by applying modest heat. The surfaces need to be held in contact during the entire cure period. If heat cured, do not exceed temperatures of 150°F (66°C).

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.

Information provided herein is based upon tests believed to be reliable. Inasmuch as Lord Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, Lord Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party including but not limited to any product end user. Nor does the company make any express or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use.

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Clean Up

Uncured Adhesive – Clean excess adhesive on the bonded assembly, as well as mixing and application equipment, before the adhesive cures. Use hot water and detergent, or an organic solvent; ketones have been shown to work best.

Cured Adhesive – Heat the cured adhesive to 400°F (204°C) or above to soften the adhesive. This allows the parts to be separated and the adhesive to be more easily removed. Some success may be achieved with commercial epoxy strippers.

Packaging

- Lord PAK Cartridges
- 5 Gallon Pail
- 55 Gallon Drum

Storage

Store Lord 403 adhesive and Accelerators #17 and #19 at temperatures under 80°F (27°C) for 6 months. For maximum shelf life storage temperatures of 40°F to 50°F (4°C to 10°C) are recommended. If stored at these cooler temperatures, return the product to room temperature before using. Protect from exposure to ultraviolet light.

Lord 403 adhesive is flammable. Do not allow open flame in the area where the adhesive is being stored, mixed or applied.

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.

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