

403/406/410



Acrylic Adhesives with Accelerator 19GB (glass beads)

Description

Lord® 403/406/410 acrylic adhesives with Accelerator 19GB bond a wide variety of prepared or unprepared metals and engineered plastics. Lord 403/406/410 acrylic adhesives with Accelerator 19GB are specifically formulated to provide the highest impact and peel strengths available in a room temperature curing adhesive. Lord 403/406/410 acrylic adhesives with Accelerator 19GB replaces welding, brazing, riveting and other mechanical fastening methods especially in low temperature environments subject to high impact or high peel loads. Lord 403/406/410 acrylic adhesives with Accelerator 19GB are available in a range of working times to accommodate a wide variety of process requirements, which makes it beneficial to use when controlled bond line thickness is important.

Features and Benefits

Bonds Unprepared Metal - requires little or no substrate preparation.

Bonds Plastic - bonds difficult plastics such as polycarbonate and XENOY®.

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

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

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

Typical Properties* of Lord 403/406/410 acrylic adhesives with Accelerator 19GB

	Lord 403 resin	Lord 406 resin	Lord 410 resin	Accelerator #19/GB curative
Appearance	Off-White to Tan Paste	Off-White to Tan Paste	Off-White to Tan Paste	Off-White Textured
Viscosity, cP Brookfield, 25°C (77°F)	100,000 - 300,000	100,000 - 300,000	100,000 - 350,000	150,000 - 450,000
Density kg/m ³ lb/gal	1097 - 1162 9.1 - 9.7	1097 - 1162 9.1 - 9.7	1097 - 1162 9.1 - 9.7	1480 - 1581 12.3 - 13.2
Flash Point	15°C (59°F)	15°C (59°F)	15°C (59°F)	>93°C (>200°F)
Mix Ratio by weight by volume	3 4	3 4	3 4	1 1
Working Time @ 24°C (75°F)	2 - 4 minutes	6 - 10 minutes	20 - 30 minutes	NA
Handleable Bonds @ 24°C (75°F)	4 - 6 minutes	12 - 17 minutes	~1 hour	NA
Shelf Life	6 months from date of shipment, @ 24°C (75°F), unopened container.			

*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 403/406/410 resin with the proper amount of Accelerator 19GB. Cartridge dispensing will automatically mix the proper amount of adhesive for each application. Once mixed, the acrylic adhesive cures rapidly.

Application

Apply Lord 403/406/410 acrylic adhesives with Accelerator 19GB to substrate surfaces. Mate the assemblies within the working time of the adhesive. Do not re-expose adhesive to air once parts are mated. Mated parts should be repositioned by sliding to achieve proper alignment.

Curing

The cure is completed in 24 hours at room temperature 25°C (77°F). 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 66°C (150°F).

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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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 204°C (400°F) 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 (19 Liter)
- 55 Gallon Drum (208 Liter)

Storage

Store Lord 403/406/410 acrylic adhesives with Accelerator 19GB at temperatures under 27°C (80°F) for 6 months. For maximum shelf life storage temperatures of 4°C - 10°C (40°F - 50°F) are recommended. If stored at these cooler temperatures, return the product to room temperature before using. Protect from exposure to ultraviolet light.

Lord 403/406/410 acrylic adhesives with Accelerator 19GB are 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 Lord product, refer to the Material Safety Data Sheet (MSDS) 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.

For additional information, contact Lord Corporation at: 814/868-3611 ext. 3277, FAX: 814/864-3452 or write: Lord Corporation, 2000 West Grandview Blvd., P.O. Box 10038, Erie, PA 16514-0038.

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