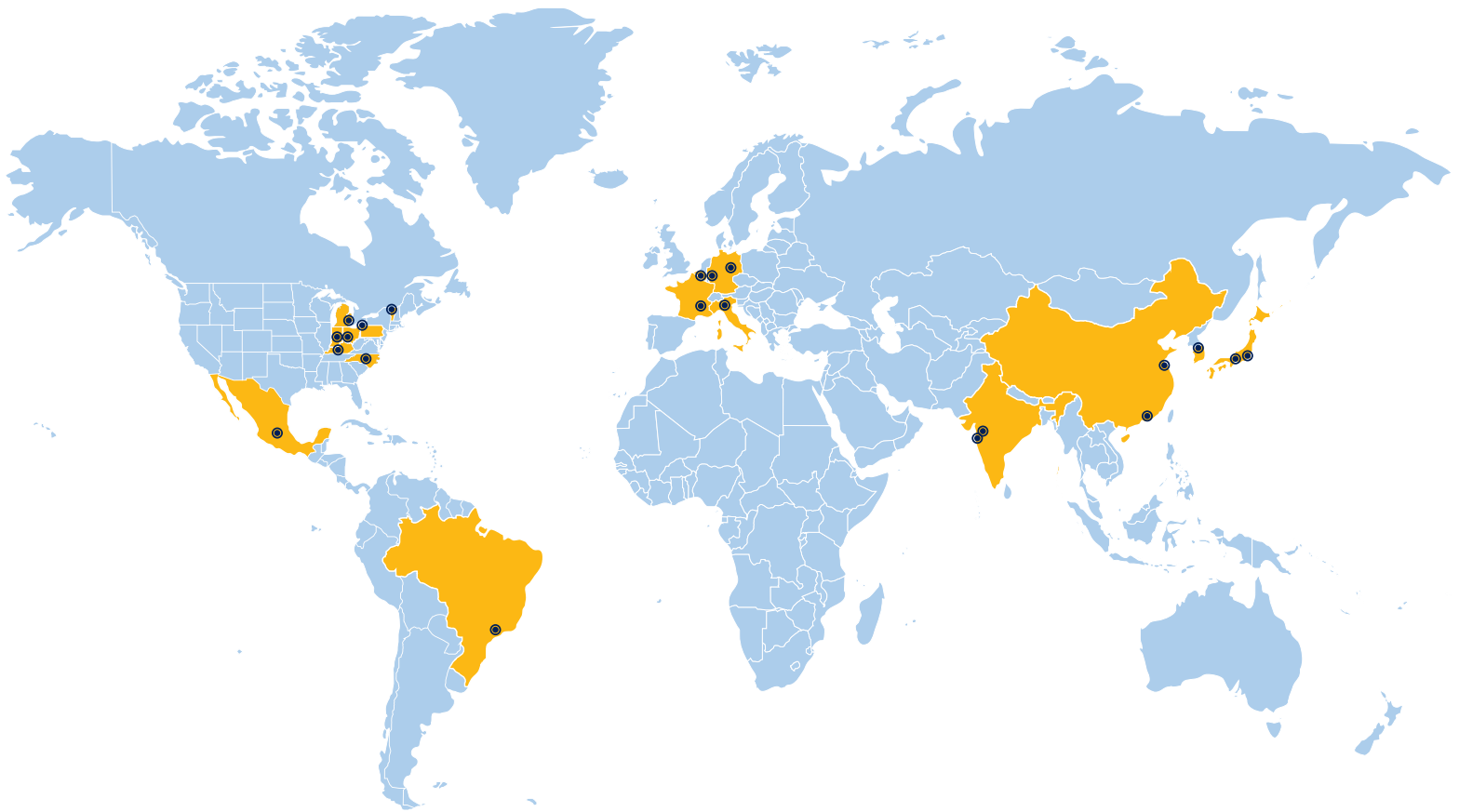




# LORD® STRUCTURAL ADHESIVES

Selector Guide

# OUR GLOBAL PRESENCE



# INDUSTRIAL ASSEMBLY STRUCTURAL ADHESIVE SOLUTIONS



At Parker Lord, we are adhesive experts. We focus on solving customer assembly needs and provide the best in industry training programs, high level application know-how, superior products and efficient supply chain delivery.



## Delivering solutions that improve products and processes for our customer is our number one priority at Parker Lord

With more than 40 years experience in developing and manufacturing structural adhesives, our extensive line of acrylic, epoxy and urethane adhesives improves appearance, strength and durability, while offering design flexibility and total cost savings. Compared to traditional fastening methods such as rivets, welds and tapes, Parker Lord Structural Adhesives eliminate the costs associated with metal preparation and finishing operations and are formulated to improve manufacturing processes and final products for a variety of composite, metal and plastic assemblies. To support your processes, LORD adhesives are available in both convenience cartridge packaging and bulk packaging that includes gallons, pails, drums and totes for high volume applications.

### How can a designer switch to an adhesive joint?

The key is embracing the conversion process. This includes understanding the chemistry behind adhesives, outlining a proper implementation plan and partnering with a reputable adhesive supplier.

### Chemistry

Acrylic-based adhesives are primarily used to bond metals. Acrylics are very aggressive, require minimum surface preparation and also work well on plastics, but should be tested for compatibility.

Urethane-based adhesives are a good choice for bonding plastics, composites, wood and foam.



Urethanes have better bond performance to prepared metals, so they are generally used for metal bonding applications where the metal is primed, painted, powder-coated or e-coated.

Epoxy-based adhesives can be used on metals, plastics, composites, concrete, wood and foam. Epoxies are generally very strong and chemically resistant.

### Outlining a Plan & Partnering

A firm commitment to following an implementation plan is vital for a successful project. First, determine the goals of the project and audit current joining processes to estimate potential savings that will help justify

the switch to adhesive bonding. If the audit is promising, follow with substrate testing to confirm bond performance. Bond trials are the most effective method to demonstrate the ability of a proposed adhesives process.

Collaborating with you and working together we offer more than just products ... our dedicated engineers will work with you to analyze your assembly process, determine proper fixturing and joining designs, perform a cost model analysis to help quantify your return on investment, select the most appropriate adhesive product for your application and allocate proper meter/mix dispensing equipment.

To learn more, contact us at  
+1 877 ASK LORD (275 5673)  
or [Parker.com/APS](http://Parker.com/APS)



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# SELECTION CONSIDERATIONS

When selecting an adhesive, there are several important considerations at every application phase, including substrate type, surface preparation, temperature, application/cure time and other factors. Use the chart to the right to determine which Parker Lord solution is best suited for your particular application.

Please note: These are general recommendations. For comprehensive product selection assistance, please visit [Parker.com/APS](http://Parker.com/APS), contact the Parker Lord Customer Support Center at +1 877 275 5673 in United States and Canada, or email [customer\\_support@parker.com](mailto:customer_support@parker.com).

## SURFACE PREPARATION

### Preparing Your Substrate

Prior to adhesive application remove soils, greases, oils, dust, mold release agents, rust and other contaminants from substrate surface with the use of a vapor-free solvent, such as MEK, acetone or IPA.

Plastics: Clean the surface with a dry rag or dampened solvent rag.

Metals: Prime, paint or grit blast, followed by a solvent wash for optimum bond performance.

Higher temperatures will decrease working, handling and cure times. Contact the Parker Lord Customer Support Center for more details.

\* Working time for mix-in-only; no-mix type has an indefinite open time

\*\* Working time for two-component type only

\*\*\* Both mix and no-mix systems are available

\*\*\*\* Mix required for two-component systems only. Contact the Parker Lord Customer Support Center at +1 877 275 5673 for specific recommendations.

\*\*\*\*\* Service temperature resistance up to 300°F (148°C); Post bake/powder coating temperature resistance up to 400°F (204°C).

|                                                               | ACRYLIC                                              | URETHANE                                                              | EPOXY                                                                  |
|---------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|
| PRE-APPLICATION PHASE                                         |                                                      |                                                                       |                                                                        |
| ADHESIVE COMPONENTS                                           | 2                                                    | 1 or 2                                                                | 2                                                                      |
| SUBSTRATE                                                     | Metals<br>Thermoplastics<br>Thermosets<br>Composites | Thermoplastics<br>Rubber<br>Thermosets<br>Composites<br>Primed Metals | Prepared Metals<br>Rubber<br>Thermosets<br>Composites<br>Primed Metals |
| SURFACE PREPARATION<br>Metals<br>Thermosets<br>Thermoplastics | No<br>Yes<br>No                                      | Yes<br>Yes<br>No                                                      | Yes<br>Yes<br>Yes                                                      |
| PHYSICAL STATE                                                | Med. Liquid to Paste                                 | Med. Liquid to Paste                                                  | Med. Liquid to Paste                                                   |
| PACKAGING                                                     | 1.47 oz - 55 gal                                     | 1.47 oz - 55 gal                                                      | 1.47 oz - 55 gal                                                       |
| APPLICATION PHASE                                             |                                                      |                                                                       |                                                                        |
| CURE TEMPERATURE                                              | Room temp. or heat                                   | Room temp. or heat                                                    | Room temp. or heat                                                     |
| WORKING TIME                                                  | 1 - 30 min*                                          | 4 - 120 min**                                                         | 5 - 180 min**                                                          |
| HANDLING TIME                                                 | 2 - 60 min                                           | 0.5 - 24 hr                                                           | 2 - 12 hr                                                              |
| SPEED CURE WITH                                               | Mild heat/catalyst                                   | Heat/catalyst                                                         | Heat                                                                   |
| FLASH POINT                                                   | >50°F to 200°F<br>(10°C to 93°C)                     | >200°F (93°C)                                                         | >200°F (93°C)                                                          |
| HUMIDITY DEPENDENT                                            | No                                                   | Yes, single-component                                                 | No                                                                     |
| MIX REQUIRED                                                  | No***                                                | Yes****                                                               | Yes                                                                    |
| POST-APPLICATION PHASE                                        |                                                      |                                                                       |                                                                        |
| SHEAR STRENGTH                                                | Very High                                            | High                                                                  | Very High                                                              |
| PEEL STRENGTH                                                 | Medium                                               | High                                                                  | Medium                                                                 |
| IMPACT STRENGTH                                               | High                                                 | High                                                                  | High                                                                   |
| RESISTANCE TO:<br>Moisture<br>Chemicals<br>UV Light           | Very good<br>Very good<br>Excellent                  | Very good<br>Very good<br>Very good                                   | Excellent<br>Excellent<br>Excellent                                    |
| TEMPERATURE RANGE                                             | -40°F to 300°F*****<br>(-40°C to 148°C)              | -40°F to 240°F<br>(-40°C to 116°C)                                    | -40°F to 400°F<br>(-40°C to 204°C)                                     |

|                                             | BARE ALUMINUM OR STEEL, INCLUDING STAINLESS | GALVANIZED STEEL            | PREFINISHED METALS, ACM                                     | FRP/GRP/CF                                            | SMC                                            | RUBBER (1) | ENGINEERED PLASTICS (ACRYLIC, PC, ABS, PVC) (2)                           | WOOD                | HDU (URETHANE FOAM)         | CERAMIC/STONE (1), CONCRETE                | THERMOPLASTICS (TPU, TPO, NYLON, TPE) (1)         | GLASS (1)                                 |
|---------------------------------------------|---------------------------------------------|-----------------------------|-------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------|------------|---------------------------------------------------------------------------|---------------------|-----------------------------|--------------------------------------------|---------------------------------------------------|-------------------------------------------|
| BARE ALUMINUM OR STEEL, INCLUDING STAINLESS | 8XX<br>Maxlok<br>4XX<br>2XX                 | 8XX<br>Maxlok<br>4XX<br>2XX | 8XX<br>Maxlok<br>4XX<br>2XX                                 | 8XX<br>Maxlok<br>6XX<br>4XX                           | 8XX<br>Maxlok<br>6XX<br>4XX                    | 3XX        | Maxlok<br>4XX<br><br>7XXX                                                 | 3XX<br><br>7XXX     | 7XXX                        | 7XXX<br><br>3XX                            | 7XXX<br><br>3XX                                   | 8XX<br>Maxlok<br>4XX<br>2XX               |
| GALVANIZED STEEL                            |                                             | 8XX<br>Maxlok<br>4XX<br>2XX | 8XX<br>Maxlok<br>4XX<br>2XX                                 | 8XX<br>Maxlok<br>4XX                                  | 8XX<br>Maxlok<br>4XX<br><br>7XXX               | 3XX        | Maxlok<br>4XX<br><br>7XXX                                                 | 7XXX                | 7XXX                        | 7XXX<br><br>3XX                            | 7XXX<br><br>3XX                                   | 8XX<br>Maxlok<br>4XX<br>2XX               |
|                                             |                                             |                             | PREFINISHED METALS, ACM<br>8XX<br>Maxlok<br>4XX<br><br>7XXX | 8XX<br>Maxlok<br>4XX<br><br>7XXX                      | 8XX<br>Maxlok<br>4XX<br><br>7XXX               | 3XX        | 7XXX                                                                      | 7XXX                | 7XXX                        | 7XXX<br><br>3XX                            | 7XXX                                              | 8XX<br>Maxlok<br>4XX                      |
|                                             |                                             |                             |                                                             | FRP/GRP/CF<br>Maxlok<br>6XX<br>4XX<br><br>7XXX<br>3XX | Maxlok<br>6XX<br>4XX<br><br>7XXX<br>3XX        | 3XX        | Maxlok<br>4XX<br><br>7XXX                                                 | 7XXX<br><br>3XX     | 7XXX                        | 7XXX<br><br>3XX                            | 7XXX<br><br>3XX                                   | 8XX<br>Maxlok<br>4XX                      |
|                                             |                                             |                             |                                                             |                                                       | SMC<br>Maxlok<br>6XX<br>4XX<br><br>7XXX<br>3XX | 3XX        | Maxlok<br>4XX<br><br>7XXX                                                 | 7XXX                | 7XXX                        | 7XXX<br><br>3XX                            | 7XXX<br><br>3XX                                   | 8XX<br>Maxlok<br>4XX                      |
|                                             |                                             |                             |                                                             |                                                       |                                                | RUBBER (1) | 7XXX                                                                      | 7XXX<br>3XX         | 7XXX                        | 7XXX<br>3XX                                | 7XXX<br>3XX                                       | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            | ENGINEERED PLASTICS (ACRYLICS, PC, ABS, PVC) (2)<br>Maxlok<br>4XX<br>7XXX | 7XXX                | 7XXX                        | 7XXX                                       | 7XXX                                              | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            |                                                                           | WOOD<br>7XXX<br>3XX | 7XXX                        | 7XXX<br>3XX                                | 7XXX<br>3XX                                       | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            |                                                                           |                     | HDU (URETHANE FOAM)<br>7XXX | 7XXX                                       | 7XXX                                              | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            |                                                                           |                     |                             | CERAMIC/STONE (1), CONCRETE<br>7XXX<br>3XX | 7XXX<br>3XX                                       | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            |                                                                           |                     |                             |                                            | THERMOPLASTICS (TPU, TPO, NYLON, TPE) (1)<br>7XXX | 7XXX                                      |
|                                             |                                             |                             |                                                             |                                                       |                                                |            |                                                                           |                     |                             |                                            |                                                   | GLASS (1)<br>8XX<br>Maxlok<br>4XX<br>7XXX |

(1) LORD AP-134 Primer for glass/non-porous ceramic LORD 7701 Surface Treatment for rubber LORD 459X Primer for TPE, TPO.

(2) Acrylic adhesives should not be used to attach large thermoplastic parts due to the differences in thermal expansion. Contact Parker Lord Customer Support Center.

Best to test for acceptable performance. These are only recommendations.



# ADHESIVE COVERAGE/VOLUME ESTIMATING TABLES

## Linear Feet (m) Bead Diameter Coverage in Cartridge

Use the table below to determine the length of adhesive bead that can be obtained from a cartridge of adhesive.

| LINEAR FEET (m) OF BEAD IN CARTRIDGE |                   |            |              |              |               |             |
|--------------------------------------|-------------------|------------|--------------|--------------|---------------|-------------|
| CARTRIDGE VOLUME                     |                   | 50 mL      | 200 mL       | 400 mL       | 415 mL        | 490 mL      |
| BEAD DIAMETER                        | 1/8 inch (3 mm)   | 20.7 (6.3) | 82.5 (25.15) | 165.5 (50.4) | 171.5 (52.27) | 203 (61.87) |
|                                      | 1/4 inch (6 mm)   | 5.1 (1.55) | 20.7 (6.3)   | 41.4 (12.6)  | 43 (13.1)     | 50.6 (15.4) |
|                                      | 3/8 inch (9.5 mm) | 2.3 (0.7)  | 9.3 (2.8)    | 18.41 (5.6)  | 19.1 (5.8)    | 22.5 (6.86) |

## Compressed Bead Thickness (Spread) - inches (mm)

Use the table below to determine the required bead diameter from the dimensions of the adhesive joint.

| COMPRESSED BEAD THICKNESS (SPREAD) - inches (mm) |                   |                  |                  |                  |
|--------------------------------------------------|-------------------|------------------|------------------|------------------|
| THICKNESS                                        |                   | 0.010" (0.25 mm) | 0.030" (0.75 mm) | 0.040" (1.00 mm) |
| BEAD DIAMETER                                    | 1/8 inch (3 mm)   | 1.25 (32)        | 0.41 (10)        | 0.3 (7.6)        |
|                                                  | 1/4 inch (6 mm)   | 4.9 (124.5)      | 1.65 (42)        | 1.23 (31)        |
|                                                  | 3/8 inch (9.5 mm) | 11.0 (279)       | 3.7 (94)         | 2.8 (71)         |

# CHEMISTRIES



# LORD® ACRYLIC ADHESIVES

LORD acrylic-based adhesives deliver world-class performance in bonding to bare metals, composites and a large number of thermoplastic materials. The combination of excellent cure kinetics at room temperature and minimal need for surface preparation make acrylic adhesives the ideal choice for both automated and manual assembly processes. Our acrylic adhesives offer outstanding toughness that delivers impact resistance, excellent low- and high-temperature performance, and long service life on top of high structural strength.

## FEATURES

- 40+ years of trusted performance
- Room temperature cure
- High strength
- Long term durability
- Wide range of open times, fast strength build-up, short handling times
- Bond dissimilar substrates, thinner, lighter materials
- Resistant to diluted acids, alkalis, solvents, greases
- Excellent corrosion and UV resistance
- High temperature resistance, withstands e-coat and powder coat processes when bonds are supported stress-free
- Non-sag, suitable for vertical applications
- Available with glass beads for bondline thickness control
- Thermal management options

## ACCELERATORS FOR ACRYLIC ADHESIVES

LORD Accelerators are curatives designed for use with LORD acrylic adhesives creating adhesive systems that will bond a variety of prepared or unprepared metals and plastics. Accelerators are available as Mix-In or No-Mix:

- Mix-In Accelerators create a system with specific cure time and properties. For specific product mix options, refer to the product Technical Data Sheet.
- No-Mix Accelerators allow for an indefinite open time for bonding. LORD Accelerator 4 can be used with LORD 200 series and 500 series acrylic adhesives.

## PRODUCT LINE

- Industrial adhesives and sealants for metal, composite and plastic
- OEM and tier metal bonding adhesives and sealants
- Two-component systems designed to support high volume and convenience dispensing
- Aftermarket and repair solutions available to support customer life cycle

## SUBSTRATES

- |                   |                                      |
|-------------------|--------------------------------------|
| • Bare Metals     | • Ceramics                           |
| • Plastics        | • Carbon Fiber                       |
| • Composites      | • Glass                              |
| • Prepared Metals | • Aluminum Composite Materials (ACM) |



| PRODUCT                                |                                 | DESCRIPTION                                                                                                                                                                                                                                                                  | ACCELERATOR                             | MIX RATIO<br>by Volume    | MIXED<br>APPEARANCE                    | WORK<br>TIME | HANDLING<br>TIME | FULL<br>CURE<br>TIME | TYPICAL<br>VISCOSITY (cP) |
|----------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------|----------------------------------------|--------------|------------------|----------------------|---------------------------|
| High<br>Strength<br>Metal<br>Bonding   | MAXLOK<br>T3S                   | Bonds prepared and unprepared metals, composites and plastics, high impact resistance, high peel strength, non-sag, resistance to indirect UV exposure, excellent environmental resistance, withstands e-coat and powder coat cycles if bonds are supported stress free      | MX                                      | 4:1                       | Grey<br>Paste                          | 3-5 min      | 6-8 min          | 24 hr                | 70,000-120,000            |
|                                        | MAXLOK<br>T6S                   |                                                                                                                                                                                                                                                                              |                                         |                           |                                        | 6-9 min      | 20-24 min        | 24 hr                | 80,000-180,000            |
|                                        | MAXLOK<br>T18S                  |                                                                                                                                                                                                                                                                              |                                         |                           |                                        | 18-24 min    | 48-72 min        | 24 hr                | 80,000-180,000            |
| Impact<br>Resistant                    | 850S                            | Bonds prepared and unprepared metals and engineered plastics, toughened structural adhesive, high impact, peel and fatigue resistance, low temperature environments, 100% elongation, non-sag, withstands e-coat and powder coat cycles when bonds are supported stress free | 25GB                                    | 10:1                      | Red Paste                              | 6-10 min     | 18-24 min        | 2 hr***              | 100,000-500,000           |
|                                        | 852S                            |                                                                                                                                                                                                                                                                              |                                         |                           |                                        | 20-25 min    | 50-70 min        | 5 hr                 | 100,000-500,000           |
| Low Read-Through                       | 810S<br>RL                      | Low Read-Through (LRT) adhesive for bonding metals, ACM and engineered plastics, ideal for glossy and flexible substrates, low exotherm, low shrinkage, withstands e-coat and powder coat cycles when bonds are supported stress free                                        | 20GB                                    | 2:1                       | Dark Grey Paste                        | 8-12 min     | 20-25 min        | 24 hr                | 40,000-130,000            |
| Battery<br>Assembly<br>Adhesives       | Cool-<br>Therm<br>TC-2002<br>UL | Bare metal bonder for use in high strength structural bonding and thermal conductivity, low CTE, meets UL-94 V-0 certification, contains glass beads                                                                                                                         | TC-2002                                 | 10:1                      | Grey Paste                             | 7-8 min      | 20-25 min        | 2-3 hr               | 500,000                   |
|                                        | Cool-<br>Therm<br>TC-850        | Bare metal bonder that provides high structural strength, flexibility, broad temperature range, low coefficient of thermal expansion, and thermal conductivity                                                                                                               | TC-2002 B                               | 10:1                      | Grey Paste                             | 6-10 min     | 20-25 min        | 2-3 hr               | 325,000                   |
|                                        | 5206                            | Metal bonder replacing mechanical fastening over a wide range of temperatures subjected to high impact and peel, contains glass beads                                                                                                                                        | 55GB                                    | 4:1                       | Grey Paste                             | 6-8 min      | 24-28 min        | 24 hr                | 100,000-220,000           |
|                                        | 5801S                           | Bare metal bonder, high strength with a room temperature cure. Accelerator 61 contains a photo initiator for use of UV                                                                                                                                                       | 61                                      | 10:1                      | Amber Paste                            | 1-2 min      | <5.5 min         | 3 hr                 | 4,000-16,000              |
| General<br>Purpose<br>Metal<br>Bonding | 403<br>RL                       | Bonds prepared and unprepared metals, engineered plastics and FRP, recommended for all types of metal assemblies, excellent cold impact and environmental resistance, withstands e-coat and powder coat cycles when bonds are supported stress free, UL 746C certified       | 17<br>19, 19GB<br>19 Black<br>19GB Grey | 10:1<br>4:1<br>4:1<br>4:1 | Tan Paste<br>Black Paste<br>Grey Paste | 2-4 min      | 4-6 min          | 24 hr*               | 100,000-300,000           |
|                                        | 406<br>RL                       |                                                                                                                                                                                                                                                                              |                                         |                           |                                        | 6-10 min     | 12-17 min        | 24 hr                | 100,000-300,000           |
|                                        | 410<br>RL                       |                                                                                                                                                                                                                                                                              |                                         |                           |                                        | 20-30 min    | 60-120 min       | 24 hr                | 100,000-300,000           |
|                                        | 201<br>RL                       | Bonds prepared and unprepared metals, plastics and ceramics, self-leveling, flows into hard-to-reach places                                                                                                                                                                  | 17<br>19, 19GB<br>19 Black              | 10:1<br>2:1<br>2:1        | Tan Paste<br>Tan Paste<br>Grey Paste   | 5-8 min      | 12-16 min        | 24 hr                | 15,000-55,000             |
|                                        | 204<br>RL                       | Bonds prepared and unprepared metals, plastics and ceramics, non-sag                                                                                                                                                                                                         | 17<br>19, 19GB<br>19 Black              | 10:1<br>2:1<br>2:1        | Tan Paste<br>Tan Paste<br>Grey Paste   | 6-8 min      | 20-30 min        | 24 hr                | 100,000-300,000           |
| Composite<br>and Cross<br>Bonding      | 606                             | Bonds composites, cross bonds metals to plastics and composites, fast set, non-sag                                                                                                                                                                                           | 6GB                                     | 10:1                      | Grey Paste                             | 6-10 min     | 16-24 min        | 24 hr                | 100,000-300,000           |
|                                        | 661                             | Bonds composites, cross bonds metals to plastics and composites, non-sag, excellent for long work time, large beads and gap filling applications                                                                                                                             | 6GB                                     | 10:1                      | Grey Paste                             | 11-19 min**  | 45-55 min**      | 24 hr**              | 125,000-350,000           |
| Plastic<br>Bonding                     | 506                             | Bonds wide variety of thermoplastics and thermoset plastics, fast handling time, durable, accommodates shock and sudden stress loading, resistance to indirect UV exposure                                                                                                   | 17<br>19                                | 10:1<br>2:1               | Tan Gel                                | 4-6 min      | 8-12 min         | 24 hr                | 20,000-70,000             |

\* Reaches 90% of ultimate strength after 2 hours.

\*\* Given a 1-inch diameter bead @ 90°F (32°C).

\*\*\* Reaches 90% of ultimate strength after 1 hour.



# LORD® URETHANE ADHESIVES

LORD urethane-based adhesives are an excellent choice for bonding to a wide variety of thermoplastics and composites, plus difficult to bond substrates such as fabric, foam and wood. They can also be used for metal bonding applications where the metal is primed or coated. Our urethane adhesives have low odor, can deliver fast or slow cure times and have the combination of high toughness, strength, and flexibility that makes these adhesives an ideal choice for joining both lightweight and structural assemblies.



## FEATURES

- Multiple work times and cure speeds to meet application requirements
- High elongation
- No odor, environmentally recommended
- Specialty versions to meet application requirements:
  - » Resist sunlight (non-yellowing)
  - » Optically clear, translucent, bright white color options
  - » Formulas for precise, small beads and large beads
- Excellent adhesion on numerous composites without pre-abrasion (e.g., SMC)
- Excellent temperature resistance within their category

## PRODUCT LINE

- Easy to use systems for industrial, OEM and tier bonding and sealing
- Single- and two-component systems for high volume and convenience dispensing
- Aftermarket and repair solutions available to support customer life cycle

## SUBSTRATES

- Composites
- Plastics
- Coated Metals
- Foams
- Textiles
- Reinforced Thermoplastics





| PRODUCT                                   |         | DESCRIPTION                                                                                                                                                                                                                                                       | COMPONENT                                                                                                                                                                            | MIX RATIO<br>by Volume | MIXED<br>APPEARANCE                    | WORK<br>TIME*                                                                                          | HANDLING<br>TIME*                                                                          | FULL CURE<br>TIME*      | TYPICAL<br>VISCOSITY (cP)                                                                                                                                                 |
|-------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High<br>Strength<br>Structural<br>Bonding | 7800    | Bonds composites, SMC, plastics and prepared metals, rapid strength development, excellent sag resistance and gap filling capability, low exotherm, high elongation, free of heavy metals, environmentally recommended                                            | 7800-A Resin<br>7800-C Curative<br>7800-D Curative                                                                                                                                   | 1:1                    | Black Paste                            | --<br>2-4 min<br>5-7 min                                                                               | --<br>12 min<br>15 min                                                                     | 24 hr                   | 8,000-25,000<br>33,000-60,000<br>33,000-60,000                                                                                                                            |
|                                           | 7542    | Structural bond to FRP, SMC and other plastics and prepared metals with minimal surface preparation, lower viscosity, suitable for gravity fed MMD, wide range of work times, non-sag paste, non-flammable, environment and chemical resistant, UL 746C certified | 7542-A Resin<br>7542-B Curative<br>7542-C Curative<br>7542-D Curative<br>7542-B Black Curative                                                                                       | 1:1                    | Brown Paste<br><br>Black Paste         | --<br>4-7 min<br>11-15 min<br>20-30 min<br>4-7 min                                                     | --<br>1-2 hr<br>2 hr<br>3 hr<br>1-2 hr                                                     | 24 hr                   | 1,500-4,500<br>7,000-14,000<br>4,000-14,000<br>5,000-14,000<br>7,000-14,000                                                                                               |
|                                           | 7545    | Structural bond to FRP, SMC and other plastics and prepared metals with minimal surface preparation, non-sag, remains in position on vertical and overhead surfaces, Non-flammable, environmental and chemical resistant                                          | 7545-A Resin<br>7545-B Curative<br>7545-C Curative<br>7545-D Curative<br>7545-E Curative<br>7545-F Curative<br><br>7545-G Curative<br>7545-B Black Curative<br>7545-D Black Curative | 1:1                    | Off-White Paste<br><br><br>Black Paste | --<br>3-5 min<br>6-8 min<br>11-18 min<br>22-38 min<br>45-65 min<br><br>1.5 min<br>3-5 min<br>11-18 min | --<br>30 min<br>60 min<br>1-1.5 hr<br>2-3 hr<br>4-5 hr<br><br>10 min<br>30 min<br>1-1.5 hr | 24 hr                   | 25,000-70,000<br>230,000-650,000<br>230,000-650,000<br>230,000-650,000<br>230,000-650,000<br>230,000-650,000<br><br>230,000-650,000<br>230,000-650,000<br>230,000-650,000 |
| Specialty<br>Bonding<br>and<br>Sealing    | 7550    | Non-structural bond to Lexan®, ABS, polycarbonate, other plastics and primed metals, Optically clear, self-leveling, flows into hard-to-reach spaces, excellent for bonding parts with tight tolerances, non-yellowing                                            | 7550-A Resin<br>7550-C Curative                                                                                                                                                      | 1:1                    | Clear Liquid                           | 3-5 min                                                                                                | 1 hr                                                                                       | 24-72 hr                | 1,800-4,000<br>6,000-12,500                                                                                                                                               |
|                                           | 7555    | Bonds and seals plastics and prepared metals, non-sag, paint and finish quickly, non-yellowing, UV and chemical resistant, formulated for auto/truck bond and seal and clean rooms                                                                                | 7555-A Resin<br>7555-C Curative<br>7555-E Curative                                                                                                                                   | 1:1                    | Bright White Paste                     | --<br>3-5 min<br>45 min                                                                                | --<br>1 hr<br>5-6 hr                                                                       | 48 hr<br>24 hr<br>48 hr | 40,000-160,000<br>130,000-230,000<br>130,000-230,000                                                                                                                      |
|                                           | 7556    | Bonds to Lexan, ABS, polycarbonate, other plastics and primed metals, translucent, non-sag, environmental and chemical resistant                                                                                                                                  | 7556-A Resin<br>7556-C Curative                                                                                                                                                      | 1:1                    | Translucent Paste                      | --<br>4-6 min                                                                                          | --<br>1.5-2.3 hr                                                                           | 24 hr                   | 40,000-160,000<br>80,000-300,000                                                                                                                                          |
|                                           | 7100    | High strength, high elongation formulated for cloth, paper, foams, rubbers and plastics, bonds plastics without crazing, attacking or lowering strength of plastics, self leveling, low viscosity, no VOC content, environmental and solvent resistant            | 7100-A Resin<br>7100-B Curative                                                                                                                                                      | 1:2                    | Glossy Black Liquid                    | 5-10 min                                                                                               | 2-3 hr                                                                                     | 24 hr                   | 3,000-16,000<br>45,000-72,000                                                                                                                                             |
|                                           | 7150    |                                                                                                                                                                                                                                                                   | 7150-A Resin<br>7150-B Curative                                                                                                                                                      | 1:2                    | Glossy Grey Liquid                     | 5-10 min                                                                                               | 2-3 hr                                                                                     | 24 hr                   | 3,000-16,000<br>41,500-65,500                                                                                                                                             |
| Single<br>Component                       | 7610DTM | Single-component, direct-to-metal adhesive/sealant for plastic, wood, fabrics and metals, non-sag, resistant to indirect UV exposure, 15 month shelf life, can finish immediately before skinning over                                                            | 7610DTM                                                                                                                                                                              | --                     | White Paste                            | 25-35 min                                                                                              | 6-12 hr                                                                                    | 1-5 days**              | 300,000-600,500                                                                                                                                                           |
|                                           | 7650    | Single-component, formulated for open cell polyethylene foam, styrofoam, HD urethane foam, plastic, fabric, rubber and prepared metal, high-tack, low viscosity, good impact resistance, suitable for laminating                                                  | 7650                                                                                                                                                                                 | --                     | Honey Liquid                           | 15-30 min                                                                                              | 24 hr                                                                                      | 1-5 days                | 400-2,000                                                                                                                                                                 |

\* Can be accelerated with heat.

\*\* Temperature dependent.

# LORD® EPOXY ADHESIVES

LORD epoxy-based adhesives adhere to the widest variety of materials, including bare metals, plastics, composites, concrete, wood, rubber, and foam. Our epoxy adhesives are best known for their high tensile strength and excellent chemical resistance, and they are the right choice when long-term exposure to high heat is required. LORD epoxy adhesives generally have long open times, and the curing process can be easily accelerated with heat to shorten handling times. Novel properties such as reduced bondline read-through can make LORD epoxy adhesives the ideal choice for some of the toughest structural bonding applications.



## FEATURES

- High strength and high temperature performance
- Chemically resistant
- Bond a wide variety of substrates
- Low odor
- Cure can be accelerated with heat
- Cryogenic version available
- Adaptable to all process needs:
  - » Mix ratio options for flexibility and modulus
  - » Low viscosity, liquid formulations
  - » High viscosity, paste formulations

## PRODUCT LINE

- High strength adhesives and sealants for industrial, OEM, tier and defense
- Single- and two-component systems for high volume and convenience dispensing
- Aftermarket and repair solutions available to support customer life cycle

## SUBSTRATES

- Composites
- Plastics TPU/TPE
- Prepared Metals
- Bare Metals
- Rubber/EPDM
- Foams



| PRODUCT                                   |                                                                                                           | DESCRIPTION                                                                                                                                  | COMPONENT                                                    | MIX RATIO<br>by Volume | MIXED<br>APPEARANCE | WORK<br>TIME    | HANDLING<br>TIME* | FULL CURE<br>TIME* | TYPICAL<br>VISCOSITY (cP) |                |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------|---------------------|-----------------|-------------------|--------------------|---------------------------|----------------|
| High<br>Strength<br>Structural<br>Bonding | 310-A/<br>310-B                                                                                           | High performance, thixotropic, formulated for primerless adhesion to composites and treated metals                                           | 310-A Resin                                                  | 1:1                    | Grey Paste          | 0.5-1 hr        | 6-8 hr            | 24 hr              | 400,000-820,000           |                |
|                                           |                                                                                                           |                                                                                                                                              | 310-B Hardener                                               |                        |                     |                 |                   |                    | 230,000-690,000           |                |
|                                           | 310-A/<br>310-B<br>BLACK                                                                                  |                                                                                                                                              | 310-A Resin                                                  | 1:1                    | Black Paste         | 0.5-1 hr        | 6-8 hr            | 24 hr              | 400,000-820,000           |                |
|                                           |                                                                                                           |                                                                                                                                              | 310-B Black Hardener                                         |                        |                     |                 |                   |                    | 200,000-700,000           |                |
|                                           | 320/310-B                                                                                                 | Toughened, high peel strength, high viscosity, formulated for bonding cured rubber treated with LORD 7701 adhesion enhancer/surface modifier | 320 Resin                                                    | 1:1                    | Grey Paste          | 0.5-1 hr        | 6-8 hr            | 24 hr              | 300,000-1MM               |                |
|                                           |                                                                                                           |                                                                                                                                              | 310-B Hardener                                               |                        |                     |                 |                   |                    | 200,000-690,000           |                |
|                                           | 320/310-B<br>BLACK                                                                                        |                                                                                                                                              | 320 Resin                                                    | 1:1                    | Black Paste         | 0.5-1 hr        | 6-8 hr            | 24 hr              | 300,000-1MM               |                |
|                                           |                                                                                                           |                                                                                                                                              | 310-B Black Hardener                                         |                        |                     |                 |                   |                    | 200,000-700,000           |                |
|                                           | 320/322                                                                                                   | Toughened, durable, impact resistant, very high viscosity, excellent environmental resistance                                                | 320 Resin                                                    | 1:1                    | Grey Paste          | 20-40 min       | 2-4 hr            | 24 hr              | 300,000-1MM               |                |
|                                           |                                                                                                           |                                                                                                                                              | 322 Hardener                                                 |                        |                     |                 |                   |                    | 450,000-2MM               |                |
| 320/323                                   | Toughened, durable, impact resistant, very high viscosity, excellent environmental resistance, UV tracers | 320 Resin                                                                                                                                    | 1:1                                                          | Off White Paste        | 20-40 min           | 2-4 hr          | 24 hr             | 300,000-1MM        |                           |                |
|                                           |                                                                                                           | 323 Hardener                                                                                                                                 |                                                              |                        |                     |                 |                   | 500,000-1.35MM     |                           |                |
| General<br>Purpose<br>Bonding             | 305-1/<br>305-2                                                                                           | General purpose, self-leveling, high strength, durable, chemically resistant                                                                 | 305-1 Resin                                                  | 1:1                    | Blue Liquid         | 1-2 hr          | 8-16 hr           | 24-48 hr           | 10,000-18,000             |                |
|                                           |                                                                                                           |                                                                                                                                              | 305-2 Hardener                                               |                        |                     |                 |                   |                    | 20,000-45,000             |                |
|                                           | 305-1/<br>307-2                                                                                           |                                                                                                                                              | 305-1 Resin                                                  | 1:1                    | Amber Liquid        | 1-2 hr          | 8-16 hr           | 24-48 hr*          | 10,000-18,000             |                |
|                                           |                                                                                                           |                                                                                                                                              | 307-2 Hardener                                               |                        |                     |                 |                   |                    | 20,000-57,000             |                |
|                                           | 305-1/<br>310-B<br>BLACK                                                                                  | General purpose medium viscosity, epoxy system for bonding waterworks assemblies, NSF approval                                               | 305-1 Resin                                                  | 1:1                    | Black Paste         | 0.5-1 hr        | 6-8 hr            | 24 hr              | 10,000-18,000             |                |
| 310-B Black Hardener                      | 200,000-700,000                                                                                           |                                                                                                                                              |                                                              |                        |                     |                 |                   |                    |                           |                |
| Rapid Cure<br>Bonding                     | 360-A/<br>360-B                                                                                           | Rapid cure at room temperature, minimal sag                                                                                                  | 360-A Resin                                                  | 1:1                    | Tan Paste           | 2-4 min         | 5-10 min          | 24 hr              | 90,000-180,000            |                |
|                                           |                                                                                                           |                                                                                                                                              | 360-B Hardener                                               |                        |                     |                 |                   |                    | 40,000-180,000            |                |
|                                           | 363-A/<br>363-B                                                                                           | Fast set, low viscosity                                                                                                                      | 363-A Resin                                                  | 1:1                    | Amber Liquid        | 3-5 min         | 15-30 min         | 4-6 hr             | 7,000-16,000              |                |
|                                           |                                                                                                           |                                                                                                                                              | 363-B Hardener                                               |                        |                     |                 |                   |                    | 8,000-20,000              |                |
| Specialty<br>Bonding                      | 304-1/<br>304-2                                                                                           | General purpose, high viscosity, gap filling, non-sag                                                                                        | 304-1 Resin                                                  | 1:1.3                  | Grey Paste          | 1-2 hr          | 8-16 hr           | 24-48 hr           | 40,000-400,000            |                |
|                                           |                                                                                                           |                                                                                                                                              | 304-2 Hardener                                               |                        |                     |                 |                   |                    | 20,000-100,000            |                |
|                                           | 306-1/<br>306-2                                                                                           | General purpose, gap filling, non-sag, meets MIL-A-24456 for damping tiles to steel                                                          | 306-1 Resin                                                  | 1:1.3                  | Grey Paste          | 1-2 hr          | 8-16 hr**         | 24-48 hr           | 40,000-400,000            |                |
|                                           |                                                                                                           |                                                                                                                                              | 306-2 Hardener                                               |                        |                     |                 |                   |                    | 20,000-100,000            |                |
|                                           | 309-1D/<br>309-2D                                                                                         | High performance, thixotropic, gap filling, non-sag, precise bondline control with glass bead option                                         | 309-1D Resin                                                 | 0.635:1                | Blue Paste          | 1.5-2 hr        | 8-16 hr           | 24 hr              | 300,000-1.1MM             |                |
|                                           |                                                                                                           |                                                                                                                                              | 309-2D Hardener                                              |                        |                     |                 |                   |                    | 300,000-1MM               |                |
|                                           | 309-1D GB/<br>309-2D                                                                                      |                                                                                                                                              | 309-1D GB Resin                                              | 0.635:1                | Blue Paste          | 1.5-2 hr        | 8-16 hr           | 24 hr              | 300,000-1.1MM             |                |
|                                           |                                                                                                           |                                                                                                                                              | 309-2D Hardener                                              |                        |                     |                 |                   |                    | 300,000-1MM               |                |
|                                           | 3170-A/<br>3170-B                                                                                         |                                                                                                                                              | High strength for cryogenic temperatures, minimal outgassing | 3170-A Resin           | 1:1                 | Lt. Amber Paste | 2 hr              | 24 hr              | 4 days                    | 30,000-70,000  |
|                                           |                                                                                                           |                                                                                                                                              |                                                              | 3170-B Hardener        |                     |                 |                   |                    |                           | 90,000-170,000 |

\* Can be accelerated with heat.  
\*\* Temperature dependent.



# SEAM SEALERS

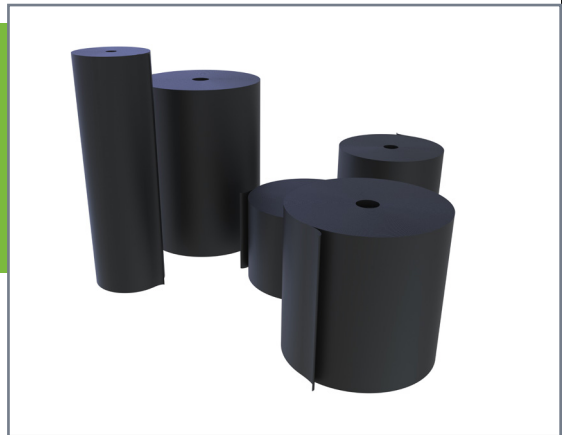
LORD seam sealers provide solutions for fabrication, finishing, environmental protection and protection against noise, vibration and harshness. Our products include one-part general purpose seam sealers and two-part structural seam sealers.



| PRODUCT | DESCRIPTION                                                                                                                                                                                            | COMPONENT                                          | MIX RATIO<br>by Volume | MIXED<br>APPEARANCE | WORK<br>TIME*           | HANDLING<br>TIME*    | FULL CURE<br>TIME*      | TYPICAL<br>VISCOSITY (cP)                           |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------|---------------------|-------------------------|----------------------|-------------------------|-----------------------------------------------------|
| 7555    | Bonds and seals plastics and prepared metals, non-sag, paint and finish quickly, non-yellowing, UV and chemical resistant, formulated for auto/truck bond and seal and clean rooms                     | 7555-A Resin<br>7555-C Curative<br>7555-E Curative | 1:1                    | Bright White Paste  | --<br>3-5 min<br>45 min | --<br>1 hr<br>5-6 hr | 48 hr<br>24 hr<br>48 hr | 40,00-160,000<br>130,000-230,000<br>130,000-230,000 |
| 7610DTM | Single-component, direct-to-metal adhesive/sealant for plastic, wood, fabrics and metals, non-sag, resistant to indirect UV exposure, 15 month shelf life, can finish immediately before skinning over | 7610DTM                                            | --                     | White Paste         | 25-35 min               | 6-12 hr              | 1-5 days**              | 300,000-600,500                                     |
| 320/323 | Non-sag seam sealer, withstands powder coat and paint process if bonds are supported stress free, UV tracers                                                                                           | 320 Resin                                          | 1:1                    | Off White Paste     | 20-40 min               | 2-4 hr               | 24 hr                   | 300,000-1MM                                         |
|         |                                                                                                                                                                                                        | 323 Hardener                                       |                        |                     |                         |                      |                         | 500,000-1.35MM                                      |

# ADHESION ENHANCERS / SURFACE MODIFIERS

LORD adhesion enhancers/surface modifiers are versatile and used with a broad range of LORD adhesives to provide enhanced adhesion to a variety of substrates. Easy application methods include spraying, wiping, dipping or flooding. Our adhesion enhancers/surface modifiers are environmentally resistant and require no mixing.

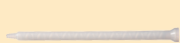
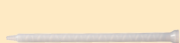


| PRODUCT | DESCRIPTION                                                                                                                                                                                                                | APPEARANCE                | SOLVENTS                    | SOLIDS<br>CONTENT BY<br>WEIGHT (%) | TYPICAL<br>VISCOSITY |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|------------------------------------|----------------------|
| AP- 134 | Single-component; low viscosity; reactive polymer primer; recommended for e-coated metals, glass, ceramic tile, concrete and some plastics                                                                                 | Clear Straw Yellow Liquid | Toluene, n-Butanol, Ethanol | 4.8-6.2                            | 0-8 cSt              |
| 459X    | Single-component primer in xylene solvent; diluted for direct application; recommended for elastomers such as natural rubber, thermoplastic elastomers (TPE), polyolefins (TPO) and EPDM                                   | Amber Liquid              | Xylene                      | 2.7-4.1                            | 10 cP                |
| 7701    | Single-component; solvent-based surface treatment for various vulcanized, thermoplastic polymeric materials; recommended for elastomers such as natural rubber, thermoplastic elastomers (TPE), polyolefins (TPO) and EPDM | Clear to Cloudy Liquid    | Ethyl Acetate               | 2.0-3.5                            | 10 cP                |

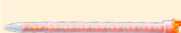
# CONVENIENCE PACKAGING

# LORD-PAK™ SYSTEMS

LORD structural adhesives are available in a convenient variety of sizes and dispensing systems.

| LORD-Pak Systems                                                                                                                                                                                                                                                                                                                                               | Cartridge Size(s) | Mix Ratio                 | Part Number                                             | Gun                                                                                 | Mix Tip # Pkg of 12 | Mix Tip # Pkg of 144 | Mix Tip Size              | Mix Tip                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|----------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------|
| <p>Side by Side Cartridges are two-part adhesive systems in a wide range of cartridge sizes.</p> <p>Refer to specific product information to find recommended dispensing equipment.</p>   | 50 mL             | 1:1<br>2:1<br>4:1<br>10:1 | 3001112<br>Manual                                       |    | --                  | --                   | --                        | --                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           | 1:1/2:1<br>3009588<br>4:1<br>3031906<br>10:1<br>3031907 |    | 1:1<br>3031303      | --                   | 0.25"x6"x21<br>Elements   |                              |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 2:1<br>3031302      | --                   | 0.26"x6"x20<br>Elements   |                              |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 4:1/10:1<br>3031281 | --                   | 0.26"x6"x20<br>Elements   |                              |
|                                                                                                                                                                                                                                                                                                                                                                | 200 mL<br>400 mL  | 1:1<br>2:1<br>4:1<br>10:1 | 3018302<br>Manual                                       |    | 3024324             | --                   | 0.375"x9"x24<br>Elements  |                              |
|                                                                                                                                                                                                                                                                                                                                                                | 200 mL<br>210 mL  | 1:1<br>2:1                | 3029937<br>Manual                                       |  | 3025382             | 3025383              | 0.4"x7.1"x24<br>Elements  |   |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3001173             | 3001195              | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3029959             | --                   | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3004657             | --                   | 0.375"x9"x24<br>Elements  |    |
|                                                                                                                                                                                                                                                                                                                                                                | 200 mL<br>210 mL  | 1:1<br>2:1                | 3004274<br>Pneumatic                                    |  | 3001173             | 3001195              | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3029959             | --                   | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                | 200 mL<br>210 mL  | 1:1<br>2:1                | 3029936<br>Pneumatic                                    |  | 3001173             | 3001195              | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3029959             | --                   | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                | 400 mL            | 1:1<br>2:1                | 3004277<br>Manual                                       |  | 3001173             | 3001195              | 0.34"x5.8"x24<br>Elements |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3004657             | --                   | 0.375"x9"x24<br>Elements  |    |
|                                                                                                                                                                                                                                                                                                                                                                | 490 mL            | 10:1                      | 3004276<br>Manual                                       |  | 3025382             | 3025383              | 0.4"x7.1"x24<br>Elements  |  |
|                                                                                                                                                                                                                                                                                                                                                                |                   |                           |                                                         |                                                                                     | 3004657             | --                   | 0.375"x9"x24<br>Elements  |    |
|                                                                                                                                                                                                                                                                                                                                                                | 400 mL            | 1:1<br>2:1                | 3027081<br>Pneumatic                                    |  | 3012582             | --                   | 0.375"x10"x24<br>Elements |   |



| LORD-Pak Systems                                                                                                                                                                                    | Cartridge Size(s) | Mix Ratio                    | Part Number          | Gun                                                                                 | Mix Tip #<br>Pkg of 12 | Mix Tip #<br>Pkg of 144 | Mix Tip Size              | Mix Tip                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|----------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------|---------------------------|---------------------------------------------------------------------------------------|
|                                                                                                                    | 415 mL<br>490 mL  | 4:1<br>10:1                  | 3018302<br>Manual    |    | 3032007                | --                      | 0.39"x8.8"x18<br>Elements |    |
|                                                                                                                                                                                                     | 415 mL            | 4:1                          | 3032023<br>Pneumatic |    | 3032007                | --                      | 0.39"x8.8"x18<br>Elements |    |
| <p>Coaxial cartridges are two-part adhesive systems in larger cartridges for bigger jobs.</p>                     | CX                | 4:1                          | 3004487<br>Manual    |   | 3001173                | 3001195                 | 0.34"x5.8"x24<br>Elements |    |
|                                                                                                                                                                                                     | CX                | 10:1                         | 3004483<br>Manual    |                                                                                     |                        |                         |                           |                                                                                       |
| <p>1/10th Gallon Cartridges fit in a standard caulk gun and are either one-part or No-Mix adhesive systems.</p>  | 1/10th<br>Gallon  | LORD<br>7610DTM<br>Cartridge | 3018079<br>Manual    |  | 3015312                | --                      | Nozzle                    |  |

Refer to specific product information on following pages to find recommended dispensing equipment for specific products and sizes.

\*CX (4:1 and 10:1 ratios) pneumatic guns are no longer available.

# CONVENIENCE PACKAGING

## LORD Acrylic Adhesives

| PRODUCT                | ACCELERATOR | PART NUMBER | SIZE   | RATIO | LORD-Pak MANUAL DISPENSING GUN | LORD-Pak PNEUMATIC DISPENSING GUN | MIXING TIP (12) | MIXING TIP (144) | PLUNGER  |
|------------------------|-------------|-------------|--------|-------|--------------------------------|-----------------------------------|-----------------|------------------|----------|
| LORD ACRYLIC ADHESIVES |             |             |        |       |                                |                                   |                 |                  |          |
| MAXLOK T3S             | MX          | 3031981     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
| MAXLOK T6S             | MX          | 3019632     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906  |
|                        | MX          | 3032002     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
| MAXLOK T18S            | MX          | 3032005     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
| 201                    | 17          | 3020986     | CX     | 10:1  | 3004483                        | --                                | 3001173         | 3001195          | --       |
|                        | 19          | 3020987     | 50 mL  | 2:1   | 3001112                        | --                                | 3031302         | --               | 3009588* |
|                        | 19          | 3031481     | 210 mL | 2:1   | 3029937                        | 3004274                           | 3001173         | 3001195          | --       |
| 204                    | 19          | 3020550     | 200 mL | 2:1   | 3029937                        | 3004274                           | 3001173         | --               | --       |
|                        | 19          | 3031353     | 400 mL | 2:1   | 3004277                        | 3027081                           | 3024324         | --               | --       |
| 403                    | 19          | 3021003     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906  |
|                        | 19          | 3021004     | CX     | 4:1   | 3004487                        | --                                | 3001173         | 3001195          | --       |
|                        | 19 BLACK    | 3032030     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
|                        | 19GB GREY   | 3032031     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
| 406                    | 17          | 3021009     | CX     | 10:1  | 3004483                        | --                                | 3001173         | 3001195          | --       |
|                        | 17          | 3031908     | 50 mL  | 10:1  | 3001112                        | --                                | 3031281         | --               | 3031907  |
|                        | 17          | 3021010     | 200 mL | 10:1  | 3018302                        | --                                | 3012582         | --               | --       |
|                        | 19          | 3021011     | CX     | 4:1   | 3004487                        | 3001128                           | 3001173         | 3001195          | --       |
|                        | 19          | 3021024     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906  |
|                        | 19          | 3032029     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
|                        | 19 BLACK    | 3032033     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
|                        | 19GB        | 3031478     | CX     | 4:1   | 3004487                        | --                                | 3001173         | 3001195          | --       |
|                        | 19GB        | 3021025     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906  |
|                        | 19GB        | 3032003     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
|                        | 19GB GREY   | 3021067     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906  |
|                        | 19GB GREY   | 3032004     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |
| 410                    | 19GB        | 3032026     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --       |

\* LORD-Pak 50mL Dispensing gun #3001112 ships with a 1:1/2:1 plunger. Plunger part number is listed for replacement purposes on 1:1/2:1 products. A separate plunger will need to be purchased for 4:1 or 10:1 ratio products.

| PRODUCT | ACCELERATOR | PART NUMBER | SIZE   | RATIO | LORD-Pak MANUAL DISPENSING GUN | LORD-Pak PNEUMATIC DISPENSING GUN | MIXING TIP (12) | MIXING TIP (144) | PLUNGER |
|---------|-------------|-------------|--------|-------|--------------------------------|-----------------------------------|-----------------|------------------|---------|
| 506     | 17          | 3021028     | CX     | 10:1  | 3004483                        | --                                | 3001173         | 3001195          | --      |
|         | 19          | 3021029     | 50 mL  | 2:1   | 3001112                        | --                                | 3031302         | --               | 3031907 |
| 606     | 6GB         | 3021620     | 490 mL | 10:1  | 3004276                        | --                                | 3012582         | --               | --      |
| 661     | 6GB         | 3021785     | 490 mL | 10:1  | 3004276                        | --                                | 3012582         | --               | --      |
| 810S    | 20GB        | 3024093     | 200 mL | 2:1   | 3029937                        | 3004274                           | 3029959         | --               | --      |
|         | 20GB        | 3024154     | 400 mL | 2:1   | 3004277                        | 3027081                           | 3024324         | --               | --      |
| 850S    | 25GB        | 3025353     | 490 mL | 10:1  | 3004276                        | --                                | 3025382         | 3025383          | --      |
| 852S    | 25GB        | 3029092     | 50 mL  | 10:1  | 3001112                        | --                                | 3031281         | --               | 3031907 |
|         | 25GB        | 3025363     | 490 mL | 10:1  | 3004276                        | --                                | 3025382         | 3025383          | --      |
| 5206    | 55GB        | 3026726     | 50 mL  | 4:1   | 3001112                        | --                                | 3031281         | --               | 3031906 |
|         |             | 3032038     | 415 mL | 4:1   | 3018302                        | 3032023                           | 3032007         | --               | --      |
| 5801S   | 61          | 3031395     | 50 mL  | 10:1  | 3001112                        | --                                | 3031281         | --               | 3031907 |
|         |             | 3031704     | 490 mL | 10:1  | 3004276                        | --                                | 3012582         | 3025383          | --      |
| TC-2002 | --          | 3028071     | 50 mL  | 10:1  | 3001112                        | --                                | 3031281         | --               | 3031907 |
|         |             | 3028102     | 490 mL | 10:1  | 3004276                        | --                                | 3012582         | 3025383          | --      |
| TC-850  | TC-2002 B   | 3031892     | 490 mL | 10:1  | 3004276                        | --                                | 3012582         | 3025383          | --      |



# CONVENIENCE PACKAGING

## LORD Urethane Adhesives

| PRODUCT                 | COMPONENTS     | PART NUMBER | SIZE     | RATIO | LORD-Pak MANUAL DISPENSING GUN | LORD-Pak PNEUMATIC DISPENSING GUN | MIXING TIP (12) | MIXING TIP (144)              | PLUNGER  |
|-------------------------|----------------|-------------|----------|-------|--------------------------------|-----------------------------------|-----------------|-------------------------------|----------|
| LORD URETHANE ADHESIVES |                |             |          |       |                                |                                   |                 |                               |          |
| 7100                    | 7100-A/B       | 3012640     | 50 mL    | 1:2   | 3001112                        | --                                | 3031302         | --                            | 3009588* |
| 7150                    | 7150-A/B       | 3012639     | 50 mL    | 1:2   | 3001112                        | --                                | 3031302         | --                            | 3009588* |
|                         | 7150-A/B       | 3013629     | 200 mL   | 1:2   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
| 7542                    | 7542-A/B       | 3003884     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7542-A/B       | 3003883     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7542-A/B       | 3032324     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7542-AB Black  | 3029673     | 50 mL    | 1:1   | 3001112                        | --                                | 3031302         | --                            | 3009588* |
|                         | 7542-A/B Black | 3025496     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7542-A/D       | 3003886     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
| 7545                    | 7545-A/B       | 3003923     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7545-A/B       | 3003922     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/B Black | 3026832     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7545-A/B Black | 3023630     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/B Black | 3018244     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7545-A/C       | 3003924     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7545-A/C       | 3003915     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/C       | 3018245     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7545-A/D       | 3003925     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/D Black | 3029662     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7545-A/D Black | 3034451     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/D Black | 3019423     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7545-A/E       | 3003917     | 200 mL   | 1:1   | 3029937                        | 3004274                           | 3004657         | --                            | --       |
|                         | 7545-A/F       | 3003929     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7545-A/F       | 3030246     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7545-A/G       | 3008743     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
| 7550                    | 7550-A/C       | 3003953     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7550-A/C       | 3031703     | 210 mL   | 1:1   | 3029937                        | 3029936                           | 3001173         | --                            | --       |
| 7555                    | 7555-A/C       | 3003961     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
|                         | 7555 A/E       | 3024769     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
| 7556                    | 7556-A/C       | 3018335     | 400 mL   | 1:1   | 3004277                        | 3027081                           | 3004657         | --                            | --       |
| 7610 DTM                | --             | 3029094     | 1/10 gal | --    | 3018079                        | 3023577                           | Nozzle: 3015312 | (cartridge includes 1 nozzle) |          |
| 7800                    | 7800-A/C       | 3027334     | 200 mL   | 1:1   | 3029937                        | 3027081                           | 3001173         | 3001195                       | --       |
|                         | 7800-A/D       | 3027333     | 50 mL    | 1:1   | 3001112                        | --                                | 3031303         | --                            | 3009588* |
|                         | 7800-A/D       | 3027335     | 200 mL   | 1:1   | 3029937                        | 3027081                           | 3001173         | 3001195                       | --       |

\* LORD-Pak 50mL Dispensing gun #3001112 ships with a 1:1/2:1 plunger. Plunger part number is listed for replacement purposes on 1:1/2:1 products. A separate plunger will need to be purchased for 4:1 or 10:1 ratio products.

# CONVENIENCE PACKAGING

## LORD Epoxy Adhesives

| PRODUCT              | COMPONENTS        | PART NUMBER | SIZE           | RATIO | LORD-Pak MANUAL DISPENSING GUN | LORD-Pak PNEUMATIC DISPENSING GUN | MIXING TIP (12) | MIXING TIP (144) | PLUNGER  |
|----------------------|-------------------|-------------|----------------|-------|--------------------------------|-----------------------------------|-----------------|------------------|----------|
| LORD EPOXY ADHESIVES |                   |             |                |       |                                |                                   |                 |                  |          |
| 305                  | 305-1/305-2       | 3003559     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
|                      | 305-1/305-2       | 3003558     | 200 mL         | 1:1   | 3029937                        | 3004274                           | 3004657         | --               | --       |
|                      | 305-1/310-B BLACK | 3025195     | 200 mL         | 1:1   | 3029937                        | 3004274                           | 3004657         | --               | --       |
| 309                  | 309-1D GB/309-2D  | 3011286     | 2.5 oz SEM Kit | --    | --                             | --                                | --              | --               | --       |
|                      | Fusor 309-1/2     | 3003289     | 2.5 oz SEM Kit | --    | --                             | --                                | --              | --               | --       |
| 310                  | 310-A/310-B       | 3003578     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
|                      | 310-A/310-B       | 3031527     | 210 mL         | 1:1   | 3029937                        | 3029936                           | 3001173         | 3001195          | --       |
| 320/ 310-B BLACK     | 320/ 310-B BLACK  | 3003630     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
|                      | 320/ 310-B BLACK  | 3016092     | 200 mL         | 1:1   | 3029937                        | 3004274                           | 3004657         | --               | --       |
| 320/ 322             | 320/322           | 3003632     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
|                      | 320/322           | 3003631     | 200 mL         | 1:1   | 3029937                        | 3004274                           | 3004657         | --               | --       |
| 320/323              | 320/323           | 3031671     | 200 mL         | 1:1   | 3029937                        | 3004274                           | 3004657         | --               | --       |
|                      | 320/323           | 3028642     | 400 mL         | 1:1   | 3004277                        | 3027081                           | 3004657         | --               | --       |
| 360                  | 360-A/360-B       | 3003643     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
| 363                  | 363-A/363-B       | 3003647     | 50 mL          | 1:1   | 3001112                        | --                                | 3031303         | --               | 3009588* |
| 3170                 | 3170-A/3170-B     | 3027665     | 400 mL         | 1:1   | 3004277                        | 3027081                           | 3001173         | 3001195          | --       |

\* LORD-Pak 50mL Dispensing gun #3001112 ships with a 1:1/2:1 plunger. Plunger part number is listed for replacement purposes on 1:1/2:1 products. A separate plunger will need to be purchased for 4:1 or 10:1 ratio products.

# TECHNICAL TIPS



## Temperature

Best practices are to use adhesive at room temperature. Typical room temperature cure conditions for adhesives is 65°F-85°F (18°C-29°C). LORD adhesives can be difficult to dispense if the adhesive is stored in a cool area.

Apply LORD adhesives above freezing temperatures. Adhesives in general, cure slower at a cooler temperature, however the end adhesive properties will be like being cured at room temperature. A general rule of thumb is that for every 18°F (or 10°C) drop in temperature the open/cure time will double. An adhesive which normally cures within 24 hours with a 15-minute open time will take approximately 48 hours to cure and have a 30-minute open time when dispensed at 57°F (13°C).

Heat will also affect the cure cycle having the opposite effect than cooler temperatures. For every 18°F (or 10°C) increase in temperature, the open/cure time will be cut in half. Heat will offer some slight advantage in getting higher bond strength.

In general, cure temperatures should not exceed 150°F (65°C) for acrylics, 250°F (121°C) for urethane adhesives and 350°F (176°C) for epoxies.

## Shelf Life

All LORD adhesives have a shelf life which is the amount of time a properly stored and applied product will last and perform per the published properties of the material. Please refer to the Use by Date on the container or refer to the technical data sheet for the shelf life of each adhesive.

## Human and Animal Contact

LORD adhesives are not recommended for assemblies that have direct human or animal contact.

## Dispensing Equipment

Parker Lord authorized distributors can assist with dispensing equipment such as plungers, applicators, and mixers. Contact 877-275-5673 or visit [www.Parker.com/APS](http://www.Parker.com/APS) for further assistance.

## Checklist for Troubleshooting Structural Adhesives

LORD Structural Adhesives follow specific cure cycles that depend on environmental conditions and application guidelines. Check the following conditions if the adhesive appears soft with no change in color after 24 hours:

- Check the Use by Date on the label to ensure the adhesive is within shelf life.

- Check the storage temperature - exposure to extreme temperatures can degrade the adhesive over time.
- Check that the mix ratio is correct by leveling the plungers and dispensing a small amount of material prior to placing the mix tip on cartridge. Purge the mixer of at least 2-4 inches of material prior to beginning the bonding process.

## Bonding Bare Metal

When bonding bare metals together, use the acrylic adhesives LORD Maxlok, 800, 400 and 200 series acrylic adhesives. These adhesives are formulated to bond metal and will act as a barrier between them to protect against galvanic corrosion. Only areas of the metal surfaces bonded with the adhesive will be protected from galvanic corrosion.

Compared to traditional fastening methods such as rivets, welds and tapes, LORD Structural Adhesives eliminate the costs associated with metal preparation and finishing operations. LORD adhesives provide greater strength across the bondline of the assembly, environmental protection, and an aesthetically pleasing appearance. Visit [www.Parker.com/APS](http://www.Parker.com/APS) for test comparison information.



# TECHNICAL TIPS

## Surface Tack

LORD acrylic adhesives can exhibit a tacky surface. LORD acrylic adhesives cure from the bottom to the top where the air can compete with the cure process causing surface tack. This is normal for acrylic adhesives and the tacky surface can be removed with alcohol or other organic solvent after full cure. Surface tack is only on the surface, bonded joints are fully cured.

## Powder Coating

LORD, Maxlok, 800 and 400 series acrylic adhesives have excellent heat resistance characteristics up to 400°F (204°C), thus reducing the concern of possible degradation of the cured adhesive during the high heat associated with the powder coating process. (Parker Lord heat resistance data available, 400°F [204°C] up to 90 minutes.)

LORD acrylic adhesives will not degrade at the higher temperatures associated with powder coating, however the hot tear strengths will be very low causing the assembly to possibly sag and slide apart especially if the assemblies are heavy. The lower strength values make it essential that the assembly is properly fixtured or placed to avoid slippage of the bonded pieces.

Spot welds or other type of mechanical fixturing are frequently used in the industry to aid in holding the assembly in place. The area to be bonded can also be masked off prior to powder coating with bonding done after the process.

The integrity of the bond will remain unchanged after powder coating, and greater strength is often seen after exposure to heat once the assembly(s) has been returned to ambient temperature. Contact 877-275-5673 or visit [www.Parker.com/APS](http://www.Parker.com/APS) for additional strength charts and graphs.

## How to Avoid Bondline Read-Through

Read-through is a condition where you can see the footprint of the adhesive through the material. This is caused by shrinkage that results in a pull on the bonded materials. Read-through can occur on surfaces that are high gloss, high polish or have a mirrored finish. Thin gauge metals less than 0.030 inches are more susceptible to read-through.

LORD 810S/20GB Low Read-Through (LRT) acrylic adhesive is a flexible adhesive system specifically designed for bonding metals, such as aluminum, galvanized steel and CRS, and engineered plastics, such as PC-ABS and ASA. LORD 810/20GB adhesive delivers fast cure speed and strong bonding with minimal bondline read-through (BLRT).

## Bonding to Glass

LORD adhesives can bond to bare glass with LORD AP-134 Adhesion Enhancer/ Surface Modifier. Prime nonporous, smooth, non-metallic substrates such as glass, porcelain, and marble with LORD AP-134. Bond the primed materials to the other substrate using a LORD Acrylic, Urethane or Epoxy adhesive.

## Bonding to Chromate Conversion

Chromate conversion used to coat metals for corrosion resistance has been found to interfere with the adhesion of some adhesive systems. LORD 200 series acrylic adhesives perform satisfactorily on aluminum with chromate conversion. Testing is recommended.

## Cross-Bonding Dissimilar Materials

When bonding larger assemblies involving dissimilar materials, such as aluminum or steel to polycarbonate or acrylic, differences may exist in the expansion coefficients of metal and plastic. Adhesives and design need to accommodate the varying rate of thermal expansion.

LORD urethane adhesives can provide flexibility and prevent stress fractures and/or bond failure of the plastic materials. Best practices are to prime the bare metals, scuff the plastic, and bond with a LORD urethane structural adhesive if your testing shows the need for more flexibility.

LORD acrylic adhesives are rigid when cured, provide exceptional structural strength and are particularly formulated for assemblies with a bare metal substrate.

## Bonding to Neoprene and Natural Rubbers

Bonding to neoprene and natural rubbers can be difficult. Prime elastomers with LORD 7701 Adhesion Enhancer/Surface Modifier. Metal surfaces should be sand blasted or ground to a white finish. LORD epoxy adhesives such as LORD 305, 310, or 320/322 are good choices.

# TECHNICAL TIPS

## Painting Structural Adhesives

LORD Structural Adhesives are safe to paint after removing squeeze out and full cure. Refer to the technical data sheet for full cure time. After full cure, solvent wipe to remove surface tack and dust prior to painting. Testing is recommended.

## Storing LORD Acrylic Adhesives

Store LORD acrylic adhesives at temperatures under 80°F (27°C). For maximum shelf life, LORD acrylic adhesives can be refrigerated at temperatures of 40°F-50°F (4°C-10°C). Do not freeze. Do not store on top of shelves or mezzanines. Protect from exposure to direct sunlight. If stored at these cooler temperatures, return the product to room temperature before using. To ensure maximum shelf life, stage only enough adhesive needed for the day's production.

## Storing LORD Urethane Adhesives

LORD urethane adhesives are moisture sensitive. Cartridges should be left in their Mylar bag with the desiccant until ready for use. Protect partial cartridges from moisture exposure by leaving the nozzle in place to act as a seal after each use. Store LORD urethane adhesives between 65°F-85°F (18°C-30°C). Single-component LORD urethane adhesives should be stored between 60°F-80°F (16°C-27°C). The single-component materials will react when exposed to moisture and air. For maximum shelf life after opening bulk containers, replace the lid or cap as quickly as possible and purge with nitrogen.

## Storing LORD Epoxy Adhesives

Store LORD epoxy adhesives in the original containers between 60°F-80°F (16°C-27°C). If stored at cooler temperatures, return the product to room temperature before using. Full physical properties of epoxy adhesives only develop if the product is dispensed at 65°F (18°C) or above. Epoxy adhesives may be heated to ease dispensing from a cartridge [maximum 150°F (66°C)] as the addition of heat will shorten the work time of the product.

## Storing Adhesion Enhancers/ Surface Modifiers

Store LORD adhesion enhancers/ surface modifiers should in their original containers. When transferring to another container, only transfer the amount needed for the application. Do not return unused material to the original container as this will cause contamination. LORD 7701 cannot be stored in metal containers or be used with metal acid brushes as this will cause the material to precipitate white particles. Keep all LORD adhesion enhancers/surface modifiers, except LORD 459X, in a cool, dark and dry area. LORD AP-134 can gel if exposed to moisture and should be capped with nitrogen.

# INDUSTRIES



# INDUSTRIAL

## Manufacturing, Fabrication, Product Finishing & Product Assembly

With more than 40 years of proven experience in the industrial assembly market, Parker Lord has created adhesive and sealing solutions with unique product chemistries to bond and seal a variety of substrates with multiple cure speeds in order to adapt to your specific manufacturing environment. Our adhesives also offer easy field application for repair and refurbishment onsite.

### Benefits of LORD Adhesives for Industrial Manufacturing

- Increased productivity
- Reduced stress points
- Bond and seal in one step
- Environmentally resistant
- High strength, durability and UV protection
- Adaptable product line to fit various manufacturing processes

### Featured Applications

- 1 Metal Bonding
- 2 Plastic Bonding
- 3 Composite Bonding
- 4 Specialty Materials and Cross Bonding





# RECREATIONAL & MARINE VEHICLES

## ATV, Motor Homes, Boat & Jet Ski

Ideal applications are aluminum and galvanized front panel, roof, sidewall and door panel bonding. LORD adhesives improve aesthetics, strength and eliminate leak points, making it easier to apply logos and advertisements while reducing aftermarket service due to improved product quality.

### Benefits of LORD Adhesives for Recreational Vehicle Manufacturers

- Ability to bond dissimilar substrates
- High performance, two-component sealants
- High adhesion, durability leads to long service life
- Increased output through reduced cycle times vs. traditional welding and joining methods
- Reduced maintenance requirements due to less leaks

### Featured Applications

- 1 Composite-to-Composite Bonding
- 2 Cross Bonding
- 3 Metal Bonding
- 4 Seam Sealing
- 5 Glass Bonding



# TRUCKS & TRAILER

## Heavy-Duty Truck & Trailer

For more than 50 years, we have provided high-value product solutions and application expertise within the Heavy-Duty Truck industry. Our structural adhesives offer a myriad of benefits including improved strength and durability, enhanced exterior aesthetics and reduced cost compared to mechanical fastening methods. Our material solutions are employed in all aspects of manufacture from design, to the assembly line and into repair and serve as industry benchmarks for quality, value and durability.

### Benefits of LORD Adhesives for Heavy-Duty Truck and Trailer Manufacturers

- Increased productivity
- Reduced stress points
- High strength, excellent adhesion
- Environmentally resistant and UV protection
- Environmentally recommended
- Easy application
- Reworkability
- Vibration damping and proven durability

### Featured Applications

- 1 Composite Bonding
- 2 Door Bonding
- 3 Cab Bonding
- 4 Body Seam Sealing
- 5 Side Panel Bonding
- 6 Front Panel Bonding
- 7 Roof Panel Bonding



# PUBLIC TRANSIT

## Bus & Rail

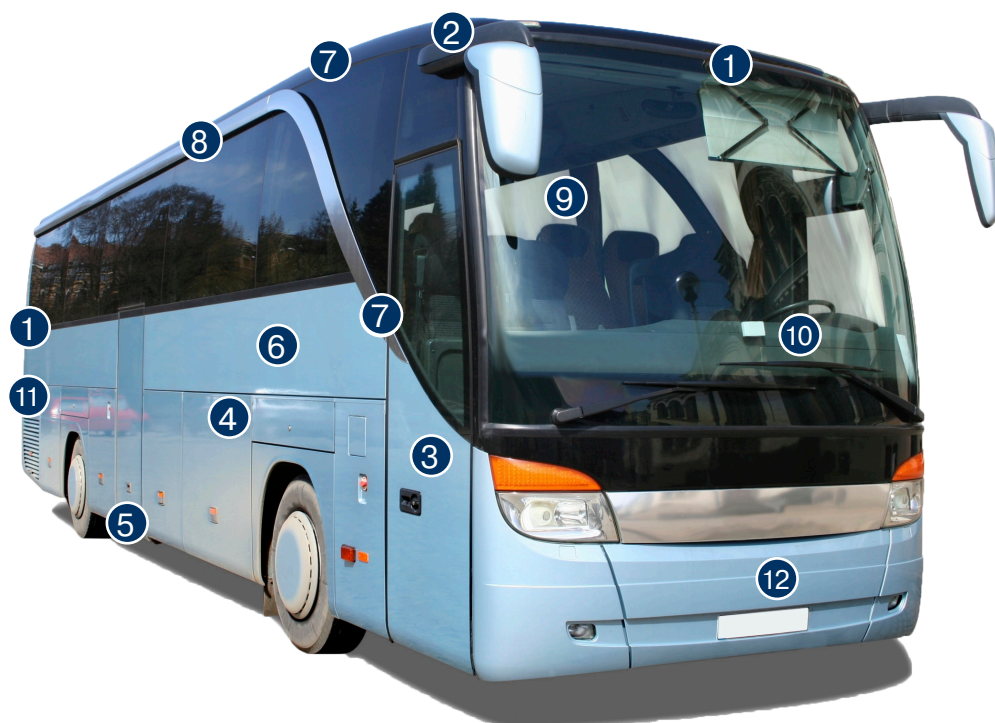
LORD structural adhesives can be used on engine compartment doors, air conditioning and air intake components, dashboards, front bumpers, grills and other internal parts as well as carriage and frame components. These adhesives help reduce stress points, leaks and cycle times, while improving aesthetics and dimensional accuracy for design freedom.

### Benefits of LORD Adhesives for Bus Manufacturers

- Ability to bond dissimilar substrates
- Weight reduction
- Increased output through reduced cycle times
- Improved aesthetics
- Reduction of stress points
- Improved fatigue life

### Featured Applications

- 1 Front & Rear Shell Bonding
- 2 Roof Bonding
- 3 Door Panel Bonding
- 4 Side Panel Bonding
- 5 Luggage Door
- 6 Side Glass Bonding
- 7 Roof Hatch
- 8 Air Conditioning Cover
- 9 Interior Parts
- 10 Front Dash and Panel Components
- 11 Rear Engine Cover
- 12 Front Bumper and Grill



# SPECIALTY VEHICLES

## Ambulance & Work Truck

With applications including aluminum, steel or galvanized roof, panel, door, tailgate, sidewall, corner cap and post bonding, the possibilities for LORD adhesive applications are endless for specialty vehicles.

### Benefits of LORD Adhesives for Specialty Vehicle Manufacturers

- Improved aesthetics
- Weight reductions
- Eliminate water leaks through rivet elimination with bond and seal technologies
- Reduction of stress points
- Improved output through reduced cycle times
- Improved durability
- Ability to bond to dissimilar metals

### Featured Applications

- 1 Sidewall Bonding
- 2 Roof Bonding
- 3 Panel Bonding
- 4 Bonded HVAC Units
- 5 Door Closures





# VEHICLE ACCESSORIES

## Car & Truck Accessories

Our adhesives and sealants allow manufacturers to bond and seal in one step which improves cost, performance and warranty compared to welding and other traditional fastening methods. In addition, LORD adhesives and sealants help reduce production floor bottlenecks and improve throughput to enhance profitability. Our materials are designed to bond to a wide range of metals, plastics, composites and foams while maintaining high durability in demanding and extreme environments.

### Benefits of LORD Adhesives for Vehicle Accessories

- Structural assembly and sealing in one step
- Cross bonding
- Improved aesthetics
- Supports innovative design – bond parts with complex geometries
- Improves strength and durability

### Featured Applications

- 1 Cross Bonding
- 2 Panel to Frame
- 3 Metal Bonding
- 4 Composite Bonding
- 5 Running Boards



# HEAVY-DUTY EQUIPMENT

## Off-Highway, Construction, Agriculture & Mining

We provide value to our off-highway customers by collaborating closely with them on design, process engineering and product performance.

Parker Lord customers replace and supplement welds with structural adhesives and mechanical fasteners to bond metal to metal or cross bond various materials including composites and thermoplastics. Bonding clips and brackets improves cycle time. Since Roll Over Protection Structures (ROPS) cannot be cut or welded, bonding components to ROPS cabs during in-plant or dealer installed options maintains structural integrity.

### Benefits of LORD Adhesives for Heavy-Duty Equipment

- Increased productivity
- Reduced operating costs
- Increased uptime
- Bond and seal in one step
- Environmental and corrosion resistance
- High strength, durability and UV protection
- Adaptable product line to fit various manufacturing processes

### Featured Applications

- 1 Hood Bonding
- 2 Roof Bonding
- 3 Door Assembly
- 4 Seam Sealing
- 5 Component Bonding



# CONSTRUCTION

## Door, Window & Cladding

LORD adhesives present a stronger, faster-curing alternative to adhesives typically used in the window and door industry. They help to improve wind load resistance/design pressure for severe weather doors and sidelights. Typical bonding applications include corner key joints, perimeter bond frames, internal reinforcements, astragals, "dowel" joints and cladding.

### Benefits of LORD Adhesives for Specialty Construction Manufacturers

- Ability to bond dissimilar substrates
- 20+ years of proven frame bonding experience
- High performance, two-component sealants
- Increased output through reduced cycle times
- Improved aesthetics with low bondline read-through technology
- High adhesion and durability leading to increased structural rigidity

### Featured Applications

- 1 Window Mount Bonding and Sealant Applications
- 2 Panel to Frame Bonding
- 3 Sealant Applications
- 4 Panel Construction Bonding



# ARCHITECTURAL SIGNS

## Architectural Assembly & Signs

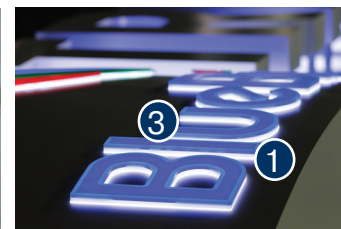
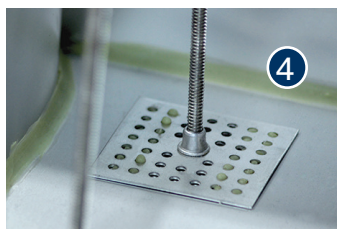
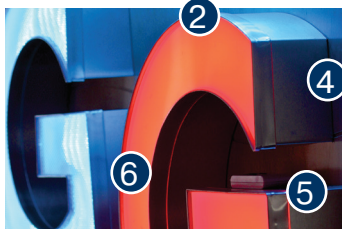
LORD structural adhesives offer versatile, convenient and durable adhesive solutions for sign assembly.

### Benefits of LORD Adhesives for Architectural Signs

- 40+ years of trusted, proven performance
- Improved appearance
- High strength and long term durability
- Excellent environmental and corrosion resistance
- Job sized packaging
- Cross bonding dissimilar materials
- UL Certified product options

### Featured Applications

- 1 Metal Frames, Sign Cabinets
- 2 Channel Letters
- 3 ACM Panels, Sign Face
- 4 Fasteners
- 5 Sealing
- 6 Plastic Bonding





## Cautionary Information

Before using any Parker Lord product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

Verify Volatile Organic Compounds (VOC) requirements with the applicable local, regional and state air quality authorities before importing, selling or using this product. VOC rules, thresholds and reporting obligations vary by jurisdiction; compliance is the responsibility of the importer/seller/owner.

*For industrial/commercial use only.*  
Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

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