

The technology of choice for high-performance bonds

Pliogrip® structural adhesives



ASHLAND

For more than 45 years, Ashland's Pliogrip® adhesives have been specified for use in transportation, aerospace, infrastructure, industrial and aftermarket repair applications around the world. With unmatched performance, Pliogrip structural adhesives have been the technology of choice for the world's leading OEMs for the bonding of composite body assemblies, specialty components, under-the-hood or vehicle framing applications. Pliogrip is used to bond a variety of materials including FRP, CFRP, TPO, steel and aluminum.

Application examples:

• **Automotive OEM:**

hoods fenders roofs
spoilers panels

• **Construction:**

bridges poles
wind turbines

• **Heavy-duty transportation:**

trains trucks buses
tractors

• **Industrial:**

furniture door skins
bathtubs sports equipment

• **Marine:**

ships boats

Pliogrip Acrylic Adhesives

Pliogrip structural acrylic adhesives are designed for bonding GRP composites in marine, wind transportation and general assembly applications. Acrylic adhesives provide significant performance advantages with their ability to adhere to a wide range of thermoplastics, metals and composite materials with just little or no surface preparation.

Key benefits:

- Excellent adhesion to many substrates with just little or no surface preparation.
- Less boil during cure compared to competitive acrylic adhesives.
- Fast room-temperature cure; low-cost tooling.



Pliogrip Polyurethane Adhesives



Key benefits:

- Tough; superior impact resistance especially at low temperatures.
- High sag resistance compared with gravity flow single components.
- Imperceptible shrinkage; very low risk of surface distortion effects.

Specified wherever critical performance is required, Pliogrip polyurethane adhesives are used for bonding thermosetting composites including SMC, RTM and SRIM, thermoplastics and coated metals in automotive, truck, marine, farm equipment and recreational vehicle applications. Pliogrip polyurethane adhesives are two-part, 100% solid, reactive urethane chemistries and have been specified for the most demanding bonding applications.

All products are supplied as resin/curative systems with excellent chemical and moisture resistance when cured. They exhibit high modulus strength, excellent fatigue performance and superior impact strength.

Pliogrip Epoxy Adhesives

Pliogrip epoxy adhesives are engineered to meet specific high heat and design requirements for the structural assembly of composite or metal substrates. The unique adhesive technology provides durable bonds on composite lift gates, tailgates, hoods, body panels and other parts. These adhesives are two-part, 100% solids, reactive epoxy chemistries

Whenever high heat resistance or adhesion to bare metal surfaces are required, Pliogrip Epoxy adhesives are the technology of choice. Ashland has developed modern high performance epoxy chemistries to offer a range of structural adhesives to meet today's bonding challenges.

Key benefits:

- Paint bakes up to 230°C.
- Long-term durability at elevated temperatures up to 200°C.
- Superior chemical resistance.



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Ashland Inc.

Ashland Performance Materials is the global leader in unsaturated polyester resins and vinyl ester resins. In addition, it provides customers with leading technologies in gelcoats, pressure-sensitive and structural adhesives, metal casting consumables and design services.

Ashland Inc. provides specialty chemical products, services and solutions for many of the world's most essential needs and industries. Serving customers in more than 100 countries, it operates through five commercial units: Ashland Aqualon Functional Ingredients, Ashland Hercules Water Technologies, Ashland Performance Materials, Ashland Consumer Markets (Valvoline) and Ashland Distribution.