

Permabond®

Polyolefin Bonding Structural Acrylic

Product Sales Tool

For Permabond Employees & Authorized Distributors Only

Permabond TA4605 and TA4610 are designed to bond low energy plastics like polypropylene and polyethylene, but can also be used to bond a wide variety of substrates including metals, composites, and almost all plastic materials. The ability to bond dissimilar materials overcomes the restrictions experienced with other joining methods such as solvent, friction, heat and ultrasonic welding.

■ TA4610 is higher viscosity



■ TA4605 is faster setting

■ TA4620 slow curing is also available

Permabond® TA4605 & TA4610

Features & Benefits

- No need to flame, corona, or plasma treat surfaces before bonding = cost & process saving
- Easy 1:1 mix ratio - can be manually applied or used with automatic dispensing equipment
- Non-hazardous for transport = easier shipping and storage
- Ideal for bonding a wide range of surfaces
- Some strength on PTFE
- Slower curing TA4620 grade available on request.

Competitive Products

- 3M 8005 and 8010
- Loctite 3032 and 3034

Note, all 4 competitive products are 10:1 mix ratio.

Where to sell TA4605 and TA4610

Polypropylene and polyethylene are found in various industries. For many applications Permabond cyanoacrylate and POP are perfect! These structural acrylics are more suited for applications that require more:

- Water resistance
- Chemical resistance
- Impact resistance

See how the two polyolefin bonding technologies compare here.

Permabond® TA4605 & TA4610

Things to know!

- Syneresis may occur (this looks like separation.) For best results store the cartridges tip down so any thin material can be redispersed by the plunger during application.
- The uncured adhesive will appear gritty as it contains micro particles to control gap. For many adhesives, minimal gap is desired, for TA4605 and TA4610 the induced gap, created by the micro spheres, provides optimal results.
- Permabond Polyolefin Primer POP is designed for use with cyanoacrylates only. POP will NOT increase adhesion of these structural acrylics.
- Adhesive outside of a closed joint (from excess material) will cure more slowly and may be soft due to air contact. Adhesive inside the joint will cure solid.
- Initially the bond will appear light in color but it will yellow over time; this is common for this type of product and the competitive products yellow as well.

| | POP & Cyanoacrylate | TA4605 or TA4610 |
|-------------------------------|---------------------|-------------------|
| Polypropylene Shear Strength | Substrate Failure | Substrate Failure |
| Polyethylene Shear Strength | Substrate Failure | Substrate Failure |
| Polypropylene Impact Strength | Fair | Excellent |
| Polyethylene Impact Strength | Fair | Excellent |

Contact Your Regional Sales Manager
with any questions!

Permabond®
Engineering Adhesives