

Permabond®

ISO 9001 Certified
"Our Science ... Your Success"

Polyolefin Bonding Structural Acrylic Adhesives

The Permabond TA46XX range has been developed to bond untreated polyolefin surfaces. These adhesives are ideal for bonding **polypropylene and polyethylene** - without the need to carry out costly surface pre-treatment before bonding. They can also be used to bond polyolefins to a wide variety of other substrate materials.



Untreated polypropylene lap shears bonded with TA4610. The adhesive bond is so strong the plastic stretches, deforms, and fails before the bonded joint.

Permabond® Polyolefin Bonders (TA4600 Series) Features and Benefits

- Bond low surface energy plastics
- No need to flame, corona, or plasma treat surfaces before bonding = cost and 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
- Cartridges with static mix nozzles for ease of dispensing - bulk available on request
- Full cure at room temperature
- Good chemical resistance
- Good impact strength

Ideal for bonding:

Composites

E- Coatings

EPDM

HDPE

LDPE

Most Metals

Polyethylene

Polypropylene

PTFE

UHMW



See product details on the next page.

Permabond®
Engineering Adhesives

Polyolefin Bonding Structural Acrylic Adhesives

This table represents a small selection of Permabond adhesives. For more detailed technical information and product Safety Data Sheets, visit www.permabond.com. To discuss your specific application requirements, contact us 800-640-7599 and our technical advisors will recommend the best adhesive for your application.

Structural Acrylic Polyolefin Bonders				
Grade	TA4605	TA4610	TA4611	TA4631
Appearance	A: Off-white B: Almost colorless Mixed: Off-white	A: Off-white B: Almost colorless Mixed: Off-white	A: White B: Transparent Mixed: Off-white	A: White B: White Mixed: White
Features	Fast cure	Fast cure for large components	Smaller gap fill (no micro beads)	Low odor, smaller gap fill (no micro beads)
Viscosity @ 25°C	Mixed: 125,000 cPs	Mixed: 210,000 cPs	Mixed: 21,500 cPs	Mixed: 21,500 cPs
Mix Ratio	1:1	1:1	1:1	1:1
Fixture Time	5-10 minutes	12-15 minutes	10-16 minutes	12-18 minutes
Handling Time	20-25 minutes	40-50 minutes	40-50 minutes	40-50 minutes
Working Strength	2-4 hours	6-8 hours	6-8 hours	6-8 hours
Shear Strength Polypropylene	>8 N/mm ² (>1200 psi) Substrate Failed	>8 N/mm ² (>1200 psi) Substrate Failed	>8 N/mm ² (>1200 psi) Substrate Failed	>8 N/mm ² (>1200 psi) Substrate Failed
Shear Strength Polyethylene	>7 N/mm ² (>1015 psi) Substrate Failed	>7 N/mm ² (>1015 psi) Substrate Failed	>7 N/mm ² (>1015 psi) Substrate Failed	>7 N/mm ² (>1015 psi) Substrate Failed
Service Temp	-55 to +100°C	-55 to +100°C	-55 to +100°C	-55 to +100°C
Packaging Cartridges*	10 x 50ml	10 x 50ml	15 x 25ml & 10 x 50ml	15 x 25ml & 10 x 50ml
	6 x 400ml	6 x 400ml	6 x 400ml	6 x 400ml
Storage	5-25°C (41 to 77°F)	5-25°C (41 to 77°F)	5-25°C (41 to 77°F)	5-25°C (41 to 77°F)

*Bulk available upon request

*This is a partial listing of available products.
Contact Permabond with your requirements for optimum adhesive selection.*



FLYER_TA46005_Series 120920

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