

Permabond® Polyurethane Adhesives

Permabond Polyurethane adhesives are manufactured to meet the growing demands of industrial engineers. Polyurethanes form resilient bonds to a variety of substrates. Products are available with different set times to suit production requirements. These black adhesives provide virtually invisible bonds on black leather, carbon fibre and rubber.

Two Component Polyurethane (PT)

Polyurethanes are ideal for many bonding applications including bonding composites, plastics, leather etc... in automobiles. Products are available with long working life to allow use on large bonding and potting areas.

Permabond Two Component Polyurethanes form strong bonds to:

- *Composites*
- *Metals*
- *Wood*
- *FRP*
- *Glass*
- *Plastics*
- *Leather*
- *Rubber*



Benefits of Permabond Polyurethanes include:

- *Various Set Times*
- *Adhesion to a Variety of Substrates*
- *No primer needed*
- *Good Tensile Strength*
- *Ease of Application*
- *Resilient Bonds*

Permabond[®]
Engineering Adhesives

Permabond Polyurethane Adhesive Comparison Chart

This table represents a selection of the complete range of Permabond adhesives. For more detailed technical information and product Material Safety Data Sheets, visit www.permabond.com. To discuss your specific application requirements, please call the Permabond Helpline and our technical advisors will recommend the best adhesive for you or discuss the development of a new grade or product modification to meet your technical requirements.

Polyurethane - Two Component			
Grade	PT321	PT326	PT328
Description	Fast, Strong	Moderate Pot Life	Extended Pot Life
Color Part A	Black	Black	Black
Color Part B	Cream	Cream	Cream
Viscosity Part A cP (mPa.s)	4,000-8,000	4,000-8,000	4,000-8,000
Viscosity Part B cP (mPa.s)	3,000-6,000	3,000-6,000	3,000-6,000
Specific Gravity Part A	1.25	1.25	1.25
Specific Gravity Part B	1.45	1.45	1.45
Mix Ratio	1:1	1:1	1:1
Bond Gap Fill	0.2 in. (5mm)	0.2 in. (5mm)	0.2 in. (5mm)
Pot Life	1 - 1.5 min	4 - 7 min	15 - 20 min
Handling Strength	10 - 15 min	60 - 90 min	90 - 120 min
Full Strength cured @ 23°C	24 hours	4-5 days	4-5 days
Full Strength cured @ 90°C	30 min	30 min	30 min
Hardness	D 70 - 80	D 65 - 75	D 60 - 75
Elongation	<10%	<15%	<20%
Shear Strength Grit Steel	2,600-3,600 psi (18 - 25 N/mm ²)	1,700-2,900 psi (12 - 20 N/mm ²)	1,700-2,600 psi (12 - 18 N/mm ²)
Tensile Strength	2,900-3,600 psi (20 - 25 N/mm ²)	2,300-3,600 psi (16 - 25 N/mm ²)	2,200-2,900 psi (15 - 25 N/mm ²)
Temperature Range	-40 to 248 °F (-40 to +120 °C)	-40 to 248 °F (-40 to +120 °C)	-40 to 248 °F (-40 to +120 °C)

Strength results will vary depending on the level of surface preparation and gap.

For full technical information, please refer to the TDS (Technical Data Sheet)

Permabond Worldwide

Wherever your manufacturing or R&D site may be located, Permabond representatives can be called upon to assist you. We have an extensive network of trained distributors worldwide.



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