

PRATLEY[®] SPECIAL GRADE-SP001 PERFORMANCE INDUSTRIAL ADHESIVE (A SLOW CURING GENERAL PURPOSE ADHESIVE)



Product Code 83230

SPECIAL PERFORMANCE PROPERTIES:

- Exceptionally diesel, oil, battery acid and paraffin resistant.
- Good all round chemical and acid resistance.
- Adheres well to most substrates including most rigid plastics.

POTENTIAL APPLICATIONS:

- Plumbing fittings.
- Repair lead acid battery casings.
- Repair marine equipment.
- Repair mining equipment.
- Repair chemical plant components.
- Repair swimming pool plumbing components.
- Repair rigid plastic casings.

TYPICAL LAP SHEAR ADHESIVE STRENGTHS

25 mm wide specimens, 125 mm² bond area.

Sanded Aluminium	8 ± 2 Mpa	Nylon 6.6	3 ± 0,5	Wood	19 ± 3
Steel	11 ± 4	Polycarbonate	8 ± 2	Leather	> 3 ± 2 (Leather breaks)
Copper	3 ± 1	Perspex	5 ± 1		
Natural Rubber	0,5 ± 0,1	Rigid PVC	7 ± 2		
Neoprene	0,6 ± 0,2	ABS	6 ± 1		
		Rigid Polystyrene	4 ± 1		

CONSISTENCY & COLOUR	MIXING RATIOS	TYPICAL BUTT TENSILE ADHESIVE STRENGTH
Paste like and translucent Sets hard but tough and slightly flexible	1:1 BY VOLUME Resin: Hardener 1,2:1 BY MASS Resin: Hardener Density of RESIN: 1,14g/ml Density of HARDENER: 0,97 g/ml	Steel to steel: 12 ± 1 Mpa (60 µ bond gap pulled at 50 mm/min)

CHEMICAL RESISTANCE:

Based upon % mass change after 1 year full immersion and visual assesment for cracking.

VERY GOOD ≤ 2% mass change & no cracking	GOOD ≤ 5% mass change & no cracking	FAIR ≤ 7% mass change & no cracking	NOT RECOMMENDED > 7% mass change or severe cracking
Transformer Oil Automatic Transmission Oil Sodium Hypochlorite 50% Battery Acid (35% sulphuric acid) Diesel Cutting Oil Hydraulic Oil Oil	Water/swimming Pool Water Hydrochloric Acid 10% Hydrogen Peroxide 5% Acetic Acid 5% Sulphuric Acid 10% Sodium Hydroxide 5% Anti-freeze 6% Paraffin	Nitric Acid 10% (brown) Water, and Detergent	Methanol cracks Brake Fluid cracks Perchloroethylene Petrol, Unleaded Ammonia 10% Acetone cracks Ethanol cracks Petrol Leaded cracks Toluene cracks

GEL AND CURE TIMES:

This depends on mass and temperature but gel time is 45 minutes at 20 gram mass at 25 °C ambient temperature.

Two 250ml portions of Special Performance Adhesive resin and hardener, when mixed together, (500ml) will start gelling with a central core (due to heat build up) in 16 minutes at 25 °C ambient temperature. For this reason we recommend mixing less than 200ml total volume at a time.

A handling bond will be achieved in 2 hours at 25 °C.
Full strength will be obtained after 8 hours.

TEMPERATURE RESISTANCE

GRADE - SP001 Adhesive should not be used at temperatures continuously greater than 65 °C.

POLICY STATEMENT

"The performance of our products must exceed all others on the world market"

K.G.M. Pratlley
CEO

PRATLEY

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