



## D314 PLASTIC WELDER

### 2 Part Methacrylate Structural Adhesive

2 PART STRUCTURAL

#### PRODUCT DESCRIPTION

Delta D314 Plastic Welder Adhesive is a 1:1 methacrylate based adhesive, designed for general purpose bonding of a wide variety of materials in diverse applications. It is a fast setting, non sagging paste with superior peel, shear and impact resistance. D314 can be as strong a welded joint, bonding and sealing simultaneously, whilst eliminating corrosion and warping.

#### AREAS OF USE

Permanent bonding and sealing in automotive bodywork, metal fabrication, marine construction, GRP and carbon fibre bonding, and specialist architectural/construction work. Especially useful in bonding dissimilar materials such as plastics to metals and is designed to be used in areas considered to be load bearing. Can be used in external and extreme environments due to its excellent temperature and chemical resistance.

#### PROPERTIES

1:1 Mixing ratio in 25ml manual syringe pack. Excellent adhesion properties, even without primer on a wide range of materials, such as metals, plastics and ceramics. Bonds to unprepared surfaces, especially most metal types. Remains slightly flexible giving an ability to resist vibration and temperature variations. Cures at room temperature and has excellent environmental resistance in terms of humidity, temperature and chemicals.

#### DIRECTIONS FOR USE

Clean and degrease the substrate with a suitable, non aggressive solvent or Delta Cleaning Wipes. Snap syringe cap off, this can be used to reseal the pack. The preset volumes ensure the correct ratio of material is dispensed, mix components together and apply. If applicable smooth surface with plastic spatula. Thickness of layer depends on nature of material. Apply counterpart substrate immediately. The curing time depends on amount of material used and temperature.



# 2 PART STRUCTURAL

## TECHNICAL DATA

Base	2 Part Methacrylate Polymer curing by chemical reaction without solvents.
Colour	Off White
Consistency	Paste, slightly thixotropic, non-sagging, spreadable
Density at 23°C	Part A: 0.96 g/cm <sup>3</sup> - Part B: B: 0.91 g/cm <sup>3</sup>
Viscosity at 23°C	Part A: 55000cps - Part B: B: 50000cps
Mix ratio by weight	1 to 1
Working time @ 22°C	7 Minutes
Fixture time @ 22°C	15 Minutes
Functional cure 22°C	45-60 minutes sanding and paintable
Full cure @ 22°C	After 24 hours
Service Temperature Range	-55°C to +120°C, (-55°C to +200°C intermittent)
Elongation	15-20%
Gap filling	Up to 3mm
Hardness Shore D	78 at full cure
Shelf life	12 months in unopened packaging
Storage conditions	Cool and dry

## Cure Properties

### Adhesive Tensile Shear - ASTM D1002

Steel/steel	>4000 psi
Aluminium/aluminium	>3400 psi
GRP/GRP	Substrate failure
ABS/ABS	Substrate failure

### T-Peel Strength-ASTM D1876

Steel/steel	6-7 N/mm
Aluminium/aluminium	2.6-3.5 N/mm



# 2 PART STRUCTURAL

## HEALTH AND SAFETY

Keep out of reach of children. Refer to product material Safety Data Sheet (MSDS)

## LEGAL NOTE

The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Delta Adhesives Ltd accepts no liability arising out of the use of this information or the products described herein.

Units 39-41, Claycliffe Business Park, Cannon Way, Barugh Green, Barnsley, S75 1JU. Tel: (01226) 381 571, Fax: (01226) 381 722



[www.delta-adhesives.co.uk](http://www.delta-adhesives.co.uk) email: [info@delta-adhesives.co.uk](mailto:info@delta-adhesives.co.uk)

Company Registration No. 2669167

VAT No GB 545 7804 21

