D350 FAST BLACK POLYURETHANE ADHESIVE

PRODUCT DESCRIPTION

D350 is a two part, very fast setting, room temperature curing, polyurethane adhesive system which is ideal for structural repairs and bonding plastic parts. It cures by chemical reaction of the two components, which are contained in a two part cartridge and applied through a specially designed mixing nozzle. This ensures that the 1:1 mix ratio is achieved along with the necessary amount of mixing. The product forms a durable polymer which is resistant to elevated temperatures, fuel, moisture, many solvents and chemicals. D350 is specifically designed for small, quick and durable repair jobs also referred to as 'smart repair'.

PROPERTIES

- Fast setting time with convenient 1:1 mix ratio
- Excellent adhesion to wide variety of surfaces such as Aluminum, Stainless steel, ABS, PVC, Polyurethane, Composites, Thermoplastics, Thermosetting Plastics, Wood, Glass, Concrete without any use of primer.
- General bonding and sealing.
- Sandable and overpaintable.
- Easy and cost effective repair.
- High viscosity for vertical applications.

AREAS OF USE

- Automotive trims and fittings.
- Cosmetic plastic part repairs
- Cladding and panel bonding applications.
- Any high specification bonding use.

| TECHNICAL | TYPICAL UNCURED PROPERTIES | | | | |
|-----------|---|------------------|-------------|-------------|--|
| DATA | | PART A | PART B | MIXED | |
| | Colour | Beige | Black | Black | |
| | Viscosity @ 25°C | 30,000 | 30,000 | 30,000 | |
| | Brookfield, cps Specific Gravity g/cm³ | 1.40 - 1.45 | 1.40 - 1.45 | 1.40 - 1.45 | |
| | Mix Ratio by volume | 1:1 | | | |
| | Mix Ratio by weight | 1:1 | | | |
| | Working Time | 60 - 100 seconds | | | |
| | Fixture Time | 10 - 14 Minutes | | | |
| | Functional Cure | 2 hours | | | |
| | Full Cure | 24 hours | | | |
| | Service Temperature | -20°C to 120°C | | | |



TECHNICAL DATA

| TYPICAL CURED PROPERTIES | | | | |
|--------------------------|----------------|-------------|--|--|
| T-Peel Strength | 65 - 75 Pli | ASTM D 1876 | | |
| Tensile Elongation | 170% | ASTM D 638 | | |
| Shore Hardness | 70D | ASTM D 2240 | | |
| Dielectric Strength | 350 volts/mil | ASTM D 149 | | |
| Cure Shrinkage | 0.0020 in./in. | ASTM D 2566 | | |
| Tear Resistance | 450 Pli | ASTM D 624 | | |
| Tensile Strength | 2,850 psi | ASTM D 638 | | |

TECHNICAL DATA

| LAP SHEAR STRENGTH AFTER 7 DAYS AT 25° | | | |
|--|----------|--|--|
| ABS TO ABS | 925 PSI | | |
| Steel to Steel | 1975 psi | | |
| Glass to Glass | 4050 psi | | |
| SMC to SMC | 1280 psi | | |
| Aluminium to Aluminium | 2650 psi | | |
| Concrete to Concrete | 1945 psi | | |
| GBS to GBS | 2550 psi | | |
| Galvanised Metal to Metal | 2850 psi | | |

SURFACE PREPARATION

Clean surface by solvent-wiping any deposits of heavy grease, oil, dirt, or other contaminants. Surface can also be cleaned with industrial cleaning equipment such as vapor phase degreasers or hot aqueous baths. If working with metal, abrade or roughen the surface to significantly increase the surface area and increase the bond strength. For lacquered and coated surfaces we recommend to remove the layers by sanding and degreasing with a suitable solvent. For more detailed information, please contact Delta Technical Department.

MIXING **PROCEDURE**

Proper homogenous mixing of resin and hardener is essential for the curing and development of stated strengths.

- 1. Attach cartridge to 50ml manual or pneumatic dispensing systems.
- 2. Open or remove tip.
- 3. Extrude cartridge by squeezing out some material until both sides are uniform (ensures no air bubbles are present during mixing).
- 4. Attach mix nozzle to end of cartridge.
- 5. Apply to surface and attach other substrate quickly, as you have less than 2 minutes of working time to use the product. Substrates can be clamped with a bond line thickness as small as 0.2mm.



TECHNICAL DATA SHEET EDITION: 15/07/14

PRODUCT CODE: D350 FAST BLACK STRUCTURAL POLYURETHANE ADHESIVE

Store in cool, dry place. **STORAGE**

HEALTH AND SAFETY Refer to the relevant Material Safety Data Sheet (MSDS).

PACKAGING Available in 50ml twin syringe. 400ml dispensing cartridge available on request.

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 Limited accepts no liability arising out of the use of this information or the product described herein.

Delta Adhesives Limited, Units 39 - 40, Claycliffe Business Park, Cannon Way, Barugh Green, Barnsley, S75 1JU Tel: (01226) 381 571 Fax: (01226) 381 722





3/3