

AllWeld 530 - 7 Minute

DESCRIPTION

Sylmasta methacrylate adhesives are designed to adhere to hard-to-bond engineered plastics, advanced composites, exotic metals and other difficult substrates. They produce tough, flexible adhesive bonds with little or no surface preparation and cure rapidly at room temperature to provide exceptional shear and peel strengths and environmental resistance.

AllWeld 530 - 7 Minute is a rapid-setting, tough, structural gel for high strength load bearing bonds to engineered plastics, metal, ceramics and many other materials.

Applications

- High strength bonds to load bearing metals, plastic, wood, composites etc.
- Glueing hard-to-bond plastics
- Bonding metal fasteners to moulded composite parts
- Bonding automotive carbon fibre body panels
- Bonding GRP in the marine industry
- Bonding dissimilar metals for trailer fabrication

Advantages

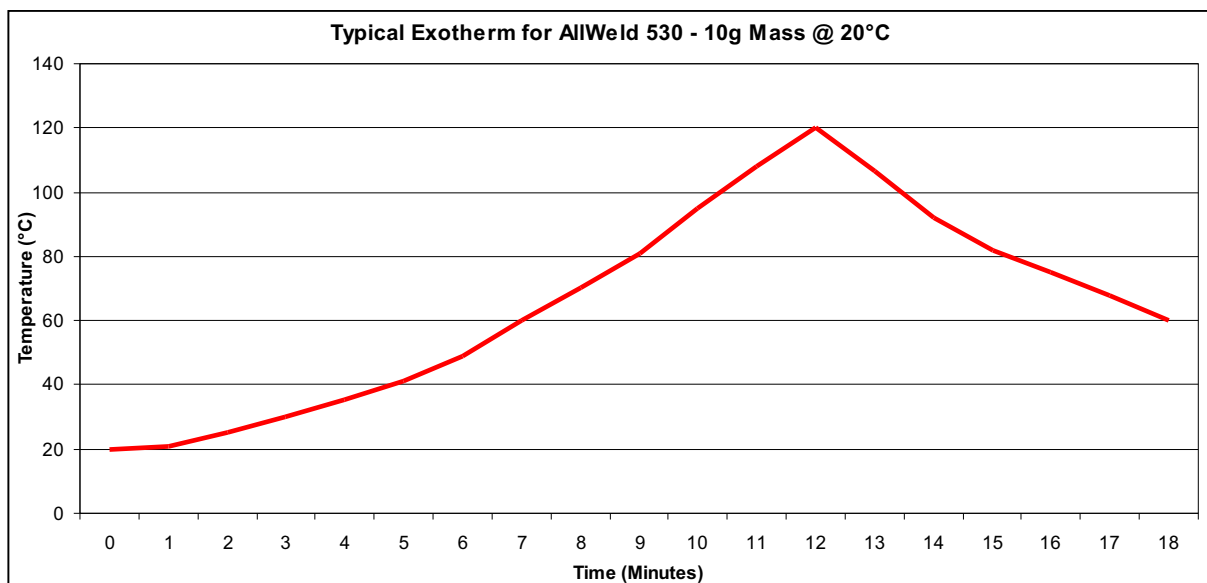
- Handling strength in 12 minutes
- High adhesive and impact strength
- Excellent chemical resistance
- Minimal surface preparation
- Weather and moisture resistant

INSTRUCTIONS

- Always consult safety data sheet before using AllWeld for the first time.
- Carry out surface preparation where required.
- Remove cap, and attach mixer nozzle.
- Dispense sufficient adhesive to ensure equal mix.
- Apply adhesive to one surface and assemble components carefully, clamping if required.
- It is always easier to remove any excess adhesive prior to cure using a suitable cleaner
- Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.

Curing Cycle

Once mixed at the 1:1 ratio the working time of AllWeld is the period whereby the adhesive remains fluid and is easily transferrable between two or more mating surfaces. Temperature, volume and substrate have a direct effect on the length of this period as AllWeld cures by an exothermic reaction. Higher temperatures and larger volumes speed the reaction causing a reduction in open and cure time. Lower temperatures and smaller volumes slow the reaction time extending both the open time and ultimate full cure time.



TECHNICAL DATA SHEET

TECHNICAL DATA

| | |
|---|---------------------------|
| Colour | Off-White |
| Appearance | Thixotropic Gel |
| Working Time (@20°C 10g Mass) | 7 Minutes |
| Handling Strength (@20°C 10g Mass) | 12 Minutes |
| ASTM D1002 Lapshear | (Average over 16 tests) |
| Aluminum | 20.4 Nmm ² |
| Stainless Steel | 38.4 Nmm ² |
| Mild Steel | 32.8 Nmm ² |
| GRP | Substrate Failure |
| ABS | Substrate Failure |
| Acrylic | Substrate Failure |
| ASTM D638 Tensile Strength | Up to 30 Nmm ² |
| Gap Fill | 4mm |
| Standard Temperature Range | -55°C to 120°C |
| Paint Bake Cycle Approval* | 20 Minutes @ 220°C |
| Aluminum lapshear following moist cataplastm | |
| 7 days @ 70°C | 26.7 MPa |
| Peel Strength Aluminium | 6 KN/m |
| Shore Hardness | 75 Shore D |

*Temperature resistance relates directly to bond size, thickness of adhesive and subjected load.

TYPICAL CHEMICAL RESISTANCE

| | |
|----------------------|-----------|
| Acetic (Dilute) 10% | Excellent |
| Ammonia | Very Good |
| Cutting Oil | Excellent |
| Glycols/Antifreeze | Excellent |
| Hydrochloric 10% | Fair |
| Mineral Spirits | Excellent |
| Motor Oil | Excellent |
| Sodium Hydroxide 10% | Very Good |

STORAGE

AllWeld should be stored unopened in suitable hazardous storage conditions for flammable adhesives that are in a cool, dry location and out of direct sunlight. Stored correctly, this grade can offer a 12 month shelf life from its manufacture in the UK.

PACKAGING

| Code | Description |
|--------------|-----------------|
| MMA530/25ml | 25ml Syringe |
| MMA530/50ml | 50ml Cartridge |
| MMA530/250ml | 250ml Cartridge |
| MMA530/400ml | 400ml Cartridge |

HEALTH & SAFETY

AllWeld is a methyl methacrylate and should not be used without consulting the SDS which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measures essential to the safe use of this product.

COMPATIBLE SUBSTRATES

| | |
|-----------------|--------------------|
| Aluminum | Vinyl Esters |
| Wood | ABS |
| Stainless Steel | Galv/Zinc Coated |
| Granite | Acrylic |
| Mild Steel | Thermoset Plastics |
| Marble | FRP |
| UPVC | Gelcoats |
| Urethanes | GRP |
| Polyesters | Epoxy laminate |