

### Product Description

The Bondchem M430 structural acrylic represents the next generation of structural adhesives, combining primer-less metal bonding and permanent toughness with a huge reduction in bond-line readthrough. The latest adhesion promoter package enables design engineers to access a huge list of compatible substrates from plastics, to metals, to the latest hybrid composite materials.

With a particular focus on the automotive manufacturing industry due to the combination of excellent environmental resistance and it's ability to avoid read-through on consumer facing panels and composite sections, this grade sets the benchmark for the industries permanent bonded solution. This grade is manufactured in two cure speeds to accommodate a wide variety of assembly and production operations.

	M430-02	M430-06	M430-16
Open Time	1-2 min	4-6 min	14-16 min
Fixture Time	3-5 min	12-15 min	20-28 min

### Properties of Uncured Material

Resin	Methacrylate Blend
Colour	Off White/Black
Appearance	Thixotropic Gel
Viscosity Brookfield T Bar	200,000 to 280,000cps
Cure System	Peroxide

### Performance of Cured Material

ASTM D1002 Lapshear	
Aluminum	21 Nmm <sup>2</sup> Cohesive Failure
Aluminum (Unabraded)	21 Nmm <sup>2</sup> Cohesive Failure
Stainless Steel	21 Nmm <sup>2</sup> Cohesive Failure
Mild Steel	21 Nmm <sup>2</sup> Cohesive Failure
GRP	5.80 Nmm <sup>2</sup> Substrate Failure
ABS	Substrate Failure
Polycarbonate	Substrate Failure
Gap Fill	Up to 10mm
Temperature Range	-55°C to 120°C
Hardness	76 Shore D
UV Stability	Excellent
Elongation at break ASTM D638-02a	30%

### Compatible Substrates\*\*

Aluminum	GRP/FRP
Stainless Steel	Granite
Mild Steel	Marble
UPVC	Urethanes
Polyesters	Vinyl Esters
ABS	Galv/Zinc Coated
DCPD	Polycarbonate
Acrylic	ACM Sheet

### Instructions For Use

1. Always consult **MSDS** before using M430 for the first time.
2. Carry out surface preparation where required.
3. Remove nut, attach mixer nozzle and replace nut.
4. Dispense sufficient adhesive to ensure equal mix and uniform color.
5. Apply adhesive to one surface and assemble components carefully, clamping if required.
6. It is always easier to remove any excess adhesive prior to cure using a suitable cleaner.
7. Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.

### Curing Cycle

Once mixed at the 10:1 ratio the working time of the M430 is the period whereby the adhesive remains fluid and is easily transferable between two or more mating surfaces. Temperature, volume and substrate have a direct effect on the length of this period as the Bondchem M430 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.

### Packaging

Bondchem M430 is available in 50ml and 490ml PBT cartridges.

### Storage & Shelf life

Bondchem M430 should be stored unopened in suitable hazardous storage conditions for adhesives that are in a cool, dry location and out of direct sunlight. Stored correctly, this grade can offer a 9 month shelf life from its manufacture in the UK. The optimum storage condition for this grade is between 6 and 12 Deg C. Storing material outside this range may reduce the overall shelf life of the material.

### Health and Safety in Use

**Bondchem M430 is a structural methacrylate and should not be used without consulting the MSDS, 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.**

**\*\*Contact your Bondchem representative for full information and usage instructions.**