

Technical Data Sheet

5020 ADHESIVE

General Description

5020 Adhesive is a high strength, fast curing two-part structural adhesive system. On application, the grade's high viscosity is ideal for both gap filling and vertical surface applications. This unique Methacrylate chemistry can offer excellent tensile and impact strength, even without priming the surfaces. In addition, the advanced macro structure provides the bonded assembly with excellent environmental and chemical resistance in the most demanding applications.

Typical Applications

- Sign Fabrication and Installation
- Automotive Assembly
- GRP Fastening Systems
- Balustrade Manufacture
- Industrial Battery Manufacture
- Composite Pipe Assembly

Chemical Resistance

Excellent Resistant to:

- Hydrocarbons
- Acids and Bases (3-10 ph)
- Salt Solutions

Packaging

- 25ml Syringe
- 50ml Syringe
- 250ml Universal
- 400ml Cartridge
- Bulk Dispensing Systems

Physical Appearance

	Adhesive Part A	Activator Part B	Mixture A&B
Chemical Type	Methyl Methacrylate	Methyl Methacrylate	
Appearance	Off White Gel	Amber/Yellowish Gel	Opaque Gel
Specific Gravity	0.97 (approx.)	0.95 (approx.)	0.97 (approx.)
Viscosity	Viscosity @20°C mPa·s	Viscosity @20°C mPa·s	Viscosity @20°C mPa·s
Brookfield Helipath	130,000 to 150,000	150,000 to 200,000	150,000 to 200,000
Flash Point	11°C	11°C	
Mix Ratio by Weight			1:1
Mix Ratio by Volume			1:1
Working Time 10g Mass			5 – 7 minutes
Working time in Nozzle			5 – 7 minutes
Fixture time steel @ 20°C			10 – 12 minutes

Typical Properties Cured Material

Hardness ASTM Shore D	75
Shrinkage (7 days)	5%
Elongation at break	2.4%
Typical Handling Strength	2-4 Hours (Heavy Duty)

ASTM D1002 Lap Shears (Tensile Result)

Steel/steel	Up to 30 N/mm ²
Aluminium/aluminium	Up to 27 N/mm ²
Polycarbonate *	Up to 13 N/mm ²
On ABS/ABS *	Up to 8 N/mm ²

* Substrate failure

Issue date: 19/11/2019 Ellsworth Adhesives Ltd

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Warranty: The information given in this product data sheet are believed to be fully accurate. However, Ellsworth Adhesives Ltd shall not be liable for its content and make no warranty with respect thereto. For additional information we request you to contact Ellsworth Adhesives Ltd - visit our web-site: www.ellsworthadhesives.co.uk

Suitable Substrates

- ABS
- Acrylics
- GRP
- FRP
- Styrenes
- Urethanes
- Vinyl
- Steel
- Aluminium
- St.Steel
- Gelcoats
- Polyesters
- PVC

Application Instruction

Please consult Ellsworth Adhesives application manual.

Terminology

- **Working/Open Time:** The time interval between application of adhesive to substrate, and the possible assembly/repositioning of the two mating parts @ 20°C
- **Fixture Time:** The length of time after the substrate assembly that will allow a joint to support a 1kg dead weight. (Tested on a 12mm x 25mm overlapped joint @ 20°C)

Shelf Life

12 months @ 20°C.

*A product Safety Data Sheet should be obtained from Ellsworth Adhesives Ltd prior to use.
ATTENTION: Before handling, read product information, Product Safety Data Sheets and
container labels for safe use, and any physical and/or health hazard information.*

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