



TECHNICAL DATA SHEET

A NEW FORCE IN CHEMICAL MANUFACTURING

AEROSOLS | WELDING CHEMICALS | ADHESIVES & THREADLOCKERS | ANTI-SEIZE & GREASES | CLEANING CHEMICALS & SOLVENTS | ELECTRICAL & ELECTRONICS

Issued: May 2020

Rapidstick™ 8-320 Methacrylate Structural Adhesive

PART NUMBER	AVAILABLE SIZE
8-320-25	25ml Dual Cartridge
8-320-50	50ml Dual Cartridge
8-320-400	400ml Dual Cartridge

PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 8-320 Methacrylate Structural Adhesive is a non-flammable two-component adhesive, designed for the versatile high strength bonding of a wide variety of substrates to plastic, without the need for surface primers or conditioners. It is an advanced crystal clear liquid composite which combines shock resistance and toughness from a unique blend of hybrid rubbers, with a high tensile shear strength from an innovative liquid plastic resin. Once bonded, this fusion of chemistries achieves an ultra high strength bond with excellent chemical and environmental resistance.

Typical applications include:

- Bonding polycarbonate letters in the sign industry
- Bonding acrylic in POS manufacture
- Repairing polycarbonate headlights
- Bonding outdoor lighting lenses and fixtures
- Assembling electric meter housings and covers

DIRECTIONS (READ LABEL BEFORE USE)

Carry out surface preparation where required. Best results will be achieved with surfaces that have been lightly abraded prior to bonding.

Remove cap and attach mixer nozzle. Dispense sufficient adhesive to ensure an equal mix.

Apply adhesive to one surface and assemble components carefully, clamping if required.

Remove any excess adhesive prior to cure.

Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.



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PHYSICAL PROPERTIES:

Resin	Methacrylate Blend
Colour	Clear
Appearance	Transparent Liquid
Viscosity (Spindle 6 @ 20 rpm)	10,000 cps
Cure System	Exothermic
Open Time	1 – 2 mins @ 20°C
Handling Strength	3 – 5 mins @ 20°C

PERFORMANCE OF CURED MATERIAL:

Lapshear, Acrylic Plastic (ASTM D1002)	8.2 Nmm ²
Lapshear, Polycarbonate (ASTM D1002)	12.5 Nmm ²
Gap Filling	Up to 3mm
Temperature Range	-55°C to +125°C

MMA COVERAGE CHART							BOND LINE COVERAGE ↓
CARTRIDGE TYPE	BEAD SIZE (ROUND) VS APPROX. BOND LINE COVERAGE PER CARTRIDGE						
1:1 MIX RATIO	1/8 inch 3.175 mm	1/4 inch 6.35 mm	3/8 inch 9.525 mm	1/2 inch 12.70 mm	5/8 inch 15.875 mm		
50ML	12,649.2	3,149.6	1,397	787.4	508	mm	
	126.50	31.50	13.97	7.87	5.08	cm	
	1.26					M	
200ML	55,575.2	13,868.4	6,197.6	3,454.4	2,209.8	mm	
	555.76	138.68	61.98	34.55	22.10	cm	
	5.56	1.39				M	
400ML	101,015.8	25,273	11,26.8	6,299.2	4,038.6	mm	
	1,010.16	252.73	11.27	62.99	40.39	cm	
	10.10	2.53				M	



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STORAGE

Keep out of reach of children. Store continuously between 13°C and 23°C. Long term exposure above 23°C will reduce the shelf life of these materials. Shelf life can be extended by refrigeration (8°C - 12°C). Do not freeze.

FIRST AID & SAFETY PRECAUTIONS

Please refer to Safety Data Sheet (SDS) before use. Use with adequate ventilation and avoid breathing fumes. Avoid contact with eyes and skin. This product may produce adverse health conditions, ranging from minor skin irritation to serious systemic effects. It should not be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet (SDS) for this product have been fully understood by all persons who will work with the material.

DISCLAIMER

Chemtools® has made every effort to ensure the information provided in this Technical Data Sheet is accurate at the time of publication. Chemtools® expressly recommends that the user make his/her own assessment to determine the suitability of the product for its intended purpose prior to application. Chemtools shall not be responsible for loss, damage, or injury, resulting from the reliance upon, or failure to adhere to, any recommendations or information contained herein; nor from abnormal use of the material; nor from any hazard inherent in the nature of the material.

FURTHER INFORMATION

Please visit Chemtools® online at www.chemtools.com.au for product photos, marketing materials, Technical Data Sheets, Safety Data Sheets, contact details, and other company/business related information.