



TECHNICAL DATA SHEET

A NEW FORCE IN CHEMICAL MANUFACTURING

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

Issued: August 2020

Rapidstick™ 8290 Threadlocker

PART NUMBER	AVAILABLE SIZE
8290-10	10ml Bottle
8290-50	50ml Bottle
8290-250	250ml Bottle

PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 8290 Threadlocker is a fast curing, medium strength compound, which penetrates threads by capillary action. It is ideal for sealing hairline cracks, small nuts and bolts, and securing set screws and other assemblies after settings are completed.

8290 has a high resistance to heat, vibrations, water, gases, oils, hydrocarbons, and many chemicals. It seals and welds porous metal parts, and prevents corrosion and leakage. Localised heating and hand tools are needed for disassembly.

8290 performs best in thin bond gaps. It bonds and seals fasteners on vibrating machines or moving components, and is specifically formulated to give controlled friction and torque/tension ratio during assembly. It can also be used for the retaining of cylindrical parts.

8290 meets Military Specifications:

- MIL-S-46163A Type III, Grade R
- MIL-S-22473E Letter Grade AA

DIRECTIONS (READ LABEL BEFORE USE)

All surfaces must be clean, dry, and free of dust and grease.

Apply to the bolt in sufficient quantity to fill threads.



TECHNICAL DATA SHEET

A NEW FORCE IN CHEMICAL MANUFACTURING

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

TECHNICAL DATA

LIQUID PROPERTIES:

Composition	Methacrylate Ester
Appearance	Green
Viscosity @ 25°C, Brookfield RVT, Spindle 3, 20 rpm	12 cps
Flash Point	> 100°C
Maximum Diameter of Thread/Gap Filling	6mm (1/4")
Shelf Life	2 years from the date of manufacture

CURED ADHESIVE PROPERTIES:

Service Temperature Range	-55°C to +150°C
Handling Cure Time	20 minutes
Functional Cure Time	1 – 3 hours
Full Cure Time	24 hours

MECHANICAL PROPERTIES:

Coefficient of Thermal Expansion, ASTM D696, K ⁻¹	80 x 10 ⁻⁶
Coefficient of Thermal Conductivity, ASTM C177, W.m ⁻¹ .K ⁻¹	0.1
Specific Heat, kJ/Kg.K	0.3
Compressive Shear Strength, ISO 10123, Steel Pins and Collars	5.4 N/mm ² / 780 psi

Torque, ISO 10964, M10 Steel Nuts and Bolts

Breakaway Torque	10 N.m. / 85 lb.in.
Prevail Torque	29 N.m. / 250 lb.in.
Break Loose Torque, Pre-Torqued to 5 N.m.	30 N.m. / 270 lb.in.
Max Prevail Torque, Pre-Torqued to 5 N.m.	40 N.m. / 350 lb.in.

CHEMICAL RESISTANCE PROPERTIES:

Chemical	Temperature	% Initial Strength Retained	
		500 hours	1,000 hours
Acetone	22°C	95	95
Ethanol	22°C	95	95
Motor Oil	125°C	85	50
Petrol	22°C	90	90
Brake Fluid	22°C	90	85
Water/Glycol	87°C	90	90



TECHNICAL DATA SHEET

A NEW FORCE IN CHEMICAL MANUFACTURING

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

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.

STORAGE

Keep out of reach of children. Store in a sealed container in a cool, dry place. Do not return any unused material to its original container.

Containers must be secured and stored upright during transit.

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.