



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™ 8510 Gasket Sealant

PART NUMBER	AVAILABLE SIZE
8510-50	50ml Tube
8510-250	250ml Tube

PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 8510 is specially formulated for rigid flange faces on transmissions, motor casings, cast-iron components, and pump housings, providing an instant, low pressure seal after application, with no threat of shrinking, creeping, or breaking.

8510 increases the torque capacity of assembled flanges, completely filling and eliminating surface scratches, voids, and other irregularities for a tighter and more stable seal. It has high temperature tolerance and excellent chemical resistance to prevent the escape of fluids and gases over the life of the connection.

DIRECTIONS (READ LABEL BEFORE USE)

For best results, ensure all internal and external surfaces are cleaned with a solvent prior to application.

Apply sealant manually as a continuous bead, or by screen-printing to one surface of the flanges. If the material is an inactive metal, or the cure speed is too slow, apply *Chemtools® Rapidstick™ 8-3471 Anaerobic Adhesives Primer* and allow to dry.

Low pressure can be used when testing to confirm a complete seal immediately after assembly.

Flanges should be tightened as soon as possible after assembly to avoid shimming.



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ADHESIVE PROPERTIES:

Composition	Dimethacrylate Ester
Colour	Red
Viscosity @ 25°C (Brookfield RVT, Spindle 7 @ 20 rpm)	188,000 - 500,000 Thixotropic (Gel)
Maximum Diameter of Thread/Gap Filling	Up to 0.20 mm
Flash Point	> 93°C
Solvent Content	None

CURING PROPERTIES:

Handling Cure Time (Primed Surface)	30 minutes - 4 hours
Handling Cure Time (Unprimed Surface)	2 - 8 hours
Temperature Range	-54°C to +205°C
Lap Shear Strength - ISO 4587 (Steel, Grit Blasted)	5 N/mm ² (725 psi)
Tensile Shear Strength - ISO 6922 (Steel, Grit Blasted)	7.5 N/mm ² (1,085 psi)
<u>Compressive Shear Strength - ISO 10123</u>	
After 24 hours at 22°C (Steel Pins and Collars)	7.5 N/mm ² (1,085 psi)

PHYSICAL PROPERTIES:

Coefficient of Thermal Conductivity, ASTM C177, W/m.K	0.10
Coefficient of Thermal Expansion, ASTM D696, K ⁻¹	80 x 10 ⁻⁶
Specific Heat, kJ/kg.K	0.30

CHEMICAL RESISTANCE PROPERTIES:

Chemical	Temperature	% Initial Strength Retained	
		500 hours	1,000 hours
Acetone	22°C	100	95
Ethanol	22°C	90	85
Motor Oil	125°C	100	100
Petrol	22°C	75	75
Brake Fluid	22°C	95	95
Water/Glycol	87°C	110	110



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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.