



# RTV851 Black Silicone

Engineering Adhesives

### DESCRIPTION

SCIGRIP® RTV851 is a high performance one component moisture curing gasket sealant for high temperature applications over 200°C. Replaces almost any cut gasket. Resists cracking, shrinkage and migration. Can be applied to dress paper or cork pre-cut shapes. Ideal with auto and workshop fluids and gases.

RTV851 has good resistance to weathering, vibration, moisture, ozone and extreme temperatures. Fully cured RTV851 can be used for extended periods at temperatures up to 204°C.

TYPICAL PROPERTIES	
Type:	Polysiloxane based compound, Acetoxy curing
Consistency:	Non-Sag Paste
Specific gravity:	1.02
Temperature Resistance:	-40 to +204°C Continuous (260°C Intermittent)

Cured – Physical	
ASTM D 676 Durometer Hardness, Shore A, points	30
ASTM D 412 Tensile Strength, psi (MPa)	350
ASTM D 412 Elongation, %	500
ASTM D 746 Brittle Point, degrees	-73°C
ASTM D 2137A Volume Coefficient of Thermal Expansion, (0°C 100°C)	9.3 X 10 <sup>-4</sup>
Thermal Conductivity, cal/(cm) (degree C),	0.45 X 10 <sup>-3</sup>
BTU per (ft) (degrees F) (hr)	0.11

Cured – Electrical	
ASTM D 257 Volume Resistivity, ohm-cm	1.5 X 10 <sup>15</sup>
ASTM D 149 Dielectric Strength, **volts/mil	550
ASTM D 150 Dielectric Constant,	
At 60 Hz	2.8
At 100 Hz	2.8
At 100kHz	2.8
ASTM D 150 Dissipation Factor,	
At 60 Hz	0.0015
At 100 Hz	0.0015
At 100kHz	0.0015



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**APPLICATIONS**

Heating installations, air-conditioning and ventilation pipes, industrial ovens, cooking stoves, engines, crank-cases, water pumps, compressors and thermostats, rocker and valve covers, oil pans, rear axle housings and intake manifolds. Bonding of materials submitted to vibrations and high temperatures. Formed-in-place gaskets for gear boxes.

**LIMITATIONS**

Avoid contact with solvent cleaners during cure.

Do not use in joints deeper than 10mm

The colour may change after heat exposure

Hydrocarbon resistance should be established in tests

Swelling may occur with pure glycols or undiluted coolants

A slower cure speed should be expected if application is carried out in confined spaces or low humidity.

**DIRECTIONS FOR USE**

Surface Preparation - Use SCIGRIP A061 Cleaner & Degreaser to ensure joint is sound, clean and dry and free from oil and grease. Rubber substrates should be abraded prior to cleaning.

Cleaning: Clean up any excess material immediately with white spirit. Hardened sealant can only be removed mechanically or with sealant remover. Wash hands with soap and water.

**PACKAGING**

SCIGRIP RTV851 is supplied ready to use in a 200ml PowerCan.

**STORAGE & SHELF LIFE**

Store in cool area out of direct sunlight.

18 months in original closed packing at temperature +5 to +25°C.

**HEALTH & SAFETY**

Pressurised container, protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn even after use.

Consult Safety Data Sheet for further information.

05/14



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