

# Silatech™ Black RTV Silicone

April 2012

## PRODUCT DESCRIPTION

Silatech™ Black RTV Silicone provides the following product characteristics:

<b>Technology</b>	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	Black homogeneous paste <sup>HMS</sup>
Components	One component - requires no mixing
<b>Cure</b>	Room temperature vulcanizing (RTV)
<b>Application</b>	Sealing or Bonding
Specific Benefit	Non-sag property allows it to be used on vertical and horizontal surfaces.
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.

Silatech™ Black RTV Silicone is designed for bonding and sealing metals, wood, plastic, glass, and other substrates. The product cures to provide a tough, flexible, waterproof, oil-resistant silicone rubber seal. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. Typical applications include electrical insulation, protection of leads from mechanical shock, trim bonding, and sealing of ductwork, vents, flues, doors, and windows. This product is typically used in applications up to 200 °C.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.03
Odor	Acetic Acid
Flash Point - See MSDS	
Extrusion Rate, g/min:	
Pressure 0.63 MPa, time 15 seconds, temperature 25 °C:	
Semco Cartridge	≥250 <sup>HMS</sup>

## TYPICAL CURING PERFORMANCE

Silatech™ Black RTV Silicone cures on exposure to moisture in the air. The product dries tack free in 25 minutes and fully cures in 24 hours. Cure times will vary with temperature, humidity and gap.

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 week @ RT

### Physical Properties:

Shore Hardness, ISO 868, Durometer A	≥14 <sup>HMS</sup>
Elongation, ISO 37, %	≥275 <sup>HMS</sup>
Tensile Strength, ISO 37	N/mm <sup>2</sup> ≥0.8 <sup>HMS</sup> (psi) (≥116)

## GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

**For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).**

### Directions for use:

1. For best performance bond surfaces should be clean and free from grease.
2. Full performance properties will develop over 72 hours.
3. Moisture curing begins immediately after the product is exposed to the atmosphere, therefore parts to be assembled should be mated within a few minutes after the product is dispensed.
4. Excess material can be easily wiped away with non-polar solvents.

### Henkel Material Specification<sup>HMS</sup>

HMS dated August 30, 2000. Test reports for each batch are available for the indicated properties. HMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.**

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

### Conversions

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 μm / 25.4 = mil  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 N/mm<sup>2</sup> x 145 = psi  
 MPa x 145 = psi  
 N·m x 8.851 = lb·in  
 N·m x 0.738 = lb·ft  
 N·mm x 0.142 = oz·in  
 mPa·s = cP

**Note**

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Reference 1.2