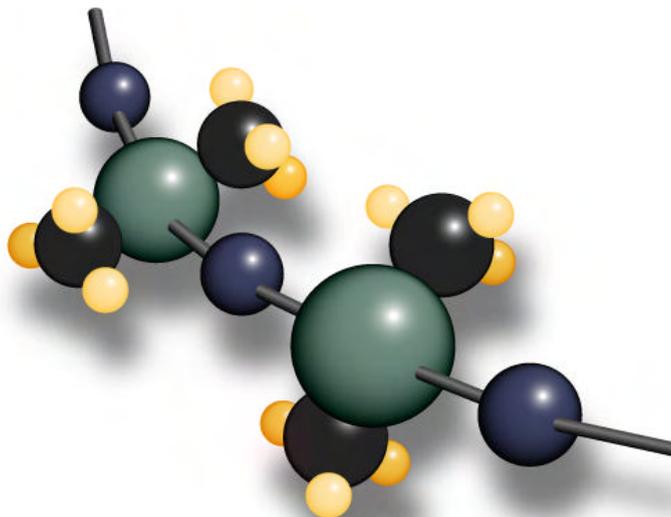


# Polymer Systems Technology Limited

UK & Ireland Distributor



© 2011 - Polymer Systems Technology Limited <sup>TM</sup>  
Unit 2. Network 4. Cressex Business Park,  
Lincoln Road, High Wycombe, Bucks. HP12 3RF  
Phone +44 (0) 1494 446610  
Fax: +44 (0) 1494 528611  
Web: <http://www.siliconepolymers.co.uk>  
Email: [sales@silicone-polymers.co.uk](mailto:sales@silicone-polymers.co.uk)



# CV-1144-2

Controlled Volatility Black RTV Silicone Oxygen Protective Overcoat

## Product Profile

### Description

- One-Part, black silicone dispersion
- Based on a dimethyl diphenyl silicone copolymer with a broad temperature range
- Provided as an RTV silicone dispersion in VM&P Naphtha

### Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions
- As a protective overcoating for electronic components and atomic oxygen resistance in space applications
- Provides radiation and thermal stress resistance

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
<b>Uncured:</b>				
Color	Black	-	-	-
Viscosity	750 cP	-	D1084, D2196	001
Non-Volatile Content	72%	-	D2288	040
<b>Cure Time, 50% R.H. @ 25°C</b>				
Tack Free	1 hours	-	C679	005
Set Up	24 hours	-	-	-
Cure System	Oxime	-	-	-
Full Cure**	7 days	-	-	-
<b>Cured: 7 days @ 25°C (77°F)</b>				
Appearance	Black, Elastomer	-	D2090	002
Specific Gravity @ 25°C (77°F)	1.20	-	D792	003
Dielectric Strength	500 volts/mil	-	-	-
Volume Resistivity	1x10 <sup>15</sup>	-	-	-
Collected Volatile Condensable Material (CVCM)	0.02%	-	E 595	072
Total Mass Loss (TML)	0.25%	-	E 595	072
Service Temperature Range	-178°F to 500°F	-115°C to 260°C	-	-

\*Performed using a SEMCO® 440 nozzle with an 1/8" orifice and 60 +/-5 psi air pressure

\*\* Thick sections may require extended cure times. Allocate adequate time for complete cure

### Instructions for Use

Thoroughly mix for 5 minutes prior to every use, as the product separates. Apply by spraying, dipping or brushing. Thin with VM&P naphtha to the appropriate viscosity for spray equipment. Mix with a moisture free solvent in a closed container, preferably with a commercial paint shaker.

**Caution:** Consult the MSDS for CV-1144-2 prior to use, as the solvent carrier is hazardous.

### Substrate Considerations

Although generally considered to be non-corrosive to most substrates, the oxime cure system may cause discoloration in the presence of copper or copper alloys.

**Note:** Some bonding application may require the use of a primer. NuSil Technology SP-120 silicone primer is recommended.

### Packaging

100 Gram  
 1 Pint (400 g)

### Warranty

6 Months

## **Warnings About Product Safety**

NuSil Technology believes that the information and data contained herein are accurate and reliable. However, the user is responsible to determine the material's suitability and safety of use. NuSil Technology cannot know each application's specific requirements and hereby notifies the user that it has not tested or determined this material's suitability or safety for use in any application. The user is responsible to adequately test and determine the safety and suitability for their application and NuSil Technology makes no warranty concerning fitness for any use or purpose. NuSil Technology has completed no testing to establish safety of use in any medical application.

NuSil Technology has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology products in a particular application, review the latest Material Safety Data Sheet and contact NuSil Technology with any questions about product safety information.

Do not use any chemical in a food, drug, cosmetic, or medical application or process until having determined the safety and legality of the use. The user is responsible to meet the requirements of the U.S. Food and Drug Administration (FDA) and any other regulatory agencies. Before handling any other materials mentioned in the text, obtain available product safety information and take the necessary steps to ensure safety of use.

## **Specifications**

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

## **Patent Warning**

NuSil Technology disclaims any expressed or implied warranty against the infringement of any patent. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any United States' or other country's patents covering the product itself, its use in combination with other products or its use in the operation of any process.

## **Warranty Information**

NuSil Technology's warranty period is 6 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides a specific written warranty of fitness for a particular use, NuSil Technology's sole warranty is that the product will meet NuSil Technology's then current specification. NuSil Technology specifically disclaims any other expressed or implied warranty, including warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology expressly disclaims any liability for incidental or consequential damages.