

## Momentive Performance Materials RTV142 White, Low Volatile, One Component Silicone Sealant

Category : Polymer , Adhesive , Thermoset , Silicone , Silicone, RTV, Adhesive/Sealant Grade

### Material Notes:

RTV 142 one-component, ready-to-use adhesive sealant cures to a tough, durable, resilient silicone rubber on exposure to atmospheric moisture at room temperature. Methyl alcohol vapors are released from the sealant surface as a by-product of cure. These vapors have low odor and are non-corrosive to metals. An important property of RTV142 is its low volatility. RTV 142 sealant has a thixotropic paste-like consistency. This allows it to be applied to vertical and overhead surfaces without sagging. Since it utilizes a moisture cure system, RTV142 sealant should not be used in thicknesses of greater than 6mm(1/4 in.). When section depths exceed 6mm(1/4in.), GE Silicones one-component, addition cure or two-component silicone rubber compounds are suggested. Mechanical properties for specimen cured 10 days at 25°C and 50% relative humidity. Key Performance Properties: One component product Room temperature cure Primerless adhesion to many substrates Low odor Non-corrosive to metals Low volatility Low temperature flexibility High temperature performance Excellent weatherability and ozone and chemical resistance Excellent electrical insulation properties Non-halogen flame retardant Applications: The non-corrosiveness to metals and low volatility of RTV142, as well as its paste consistency, make it well suited for critical electronic adhesive, gasketing, and sealing applications where a high level of volatile condensable materials cannot be tolerated. GE Silicones became a part of Momentive Performance Materials in 2006.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Momentive-Performance-Materials-RTV142-White-Low-Volatile-One-Component-Silicone-Sealant.php](http://www.lookpolymers.com/polymer_Momentive-Performance-Materials-RTV142-White-Low-Volatile-One-Component-Silicone-Sealant.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.09 g/cc	1.09 g/cc	
Linear Mold Shrinkage	<= 0.010 cm/cm	<= 0.010 in/in	
Collected Volatile Condensable Material	0.050 %	0.050 %	Ball aerospace VCM test 33074

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	34	34	
Tensile Strength, Ultimate	3.78 MPa	548 psi	
Elongation at Break	400 %	400 %	
Adhesive Bond Strength	2.0594 MPa	298.69 psi	At 100% cohesive failure
Tear Strength	8.83 kN/m	50.4 pli	
Peel Strength	10.5 kN/m	60.0 pli	At 100% cohesive failure using 1 in. x 8 in. stainless steel screen at 180° pull angle

Thermal Properties	Metric	English	Comments
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Thermal Properties	Metric	English	Comments
CTE, linear	270 $\mu\text{m/m}\cdot\text{Å}^\circ\text{C}$ @Temperature 20.0 $\text{Å}^\circ\text{C}$	752 $\mu\text{in/in}\cdot\text{Å}^\circ\text{F}$ @Temperature 68.0 $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.210 W/m-K	1.46 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$	
Maximum Service Temperature, Air	204 $\text{Å}^\circ\text{C}$	399 $\text{Å}^\circ\text{F}$	Continuous
Minimum Service Temperature, Air	-60.0 $\text{Å}^\circ\text{C}$	-76.0 $\text{Å}^\circ\text{F}$	Continuous

Electrical Properties	Metric	English	Comments
Volume Resistivity	4.50e+15 ohm-cm	4.50e+15 ohm-cm	
Dielectric Constant	2.8 @Frequency 60 Hz	2.8 @Frequency 60 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	
Dissipation Factor	0.0010 @Frequency 60 Hz	0.0010 @Frequency 60 Hz	

Processing Properties	Metric	English	Comments
Cure Time	200 min	4 hour	Tack-free

Descriptive Properties	Value	Comments
% Total Weight Loss	0.0022	Ball aerospace VCM test 33074
Application rate	975 g/min	
Color	White	
Consistency	Paste	

## Contact Songhan Plastic Technology Co.,Ltd.

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