

## RTV534LV

### Description

RTV534LV is a two-component, room temperature cure silicone adhesive that features rapid tack free time, primerless adhesion to multiple substrates with extreme low temperature stability. This white material has a thick paste-consistency making it ideal for horizontal, vertical and overhead applications without sag. Every batch of RTV534LV meets or exceeds the stringent low outgassing requirements of the ASTM E-595 standard. RTV534LV is supplied in side-by-side cartridges or pail kits. Simply mix the base compound with the curing agent to form a tough, flexible silicone elastomeric rubber.

### Key Features and Benefits

- Fast cure time at room temperature, no heat required
- Primerless adhesion to multiple substrates
- Rapid green strength build
- RTV534LV meets or exceeds ASTM E595 standard for low outgassing
- Non-sag paste
- Easy dispensability in convenient 10:1 mix ratio by volume
- Temperature ranges from -115°C (-175°F) up to 150°C (302°F)

### Typical Physical Properties

Uncured Properties	<b>NEW!</b> RTV534A-LV	<b>NEW!</b> RTV534B-LV
Consistency	Paste	Paste
Color	White	White
Application Rate (g/min)	219	1080
Viscosity – RVF #7 @ 2rpm (cps)	820,000	-
Specific Gravity	1.39	1.20
<b>TYPICAL CURED PROPERTIES</b>		
Mix Ratio by volume	10:1	
Tack Free Time @ 25°C (77°F), mins	90	
Cure Time @ 25°C (77°F), hours <sup>^</sup>	24	
<b>Mechanical:</b>		
Tensile Strength, lb/in <sup>2</sup>	275	
Elongation (%)	250	
Hardness, Shore A	35	
<b>Thermal:</b>		
Useful Temperature Range, °C (°F)	115°C (-175°F) up to 150°C (302°F)	
Coefficient of Expansion, cm/cm, °C (in/in, °F)	2.95 x 10 <sup>-4</sup> (1.64 x 10 <sup>-4</sup> )	

^ Full Cure is recommended for 7 days at 25C/50%RH

## **Processing Recommendations**

### **Mixing**

RTV534LV is supplied in pre-weighed side-by-side cartridges allowing immediate use of the product without the need of manual or mechanical mixing. Dispensing instructions should be properly followed to ensure optimal properties and cure times are achieved.

RTV534LV is also supplied in larger packaging sizes. For these options, select a mixing container 4 to 5 times larger than the volume of RTV silicone rubber compound to be used. Weigh out the RTV silicone rubber base compound and add the appropriate amount of curing agent. 10:1 ratio by volume will provide a work time or pot life of 1-1.5 hours and a cure time of 4 hour.

Using clean tools, thoroughly mix the RTV base compound and the curing agent, scraping the sides and bottom of the container carefully to produce a homogeneous mixture. When using power mixers, avoid excessive speeds which could entrap large amounts of air or cause overheating of the mixture, resulting in shorter pot life.

### **Deaeration**

Air entrapped during mixing should be removed to eliminate voids in the cured product. Expose the mixed material to a vacuum of 29 inches of mercury minimum (absolute pressure of 25mm). The material will expand, crest, and recede to about the original level as the bubbles break. Degassing is usually complete about two minutes after frothing ceases.

### **Curing**

RTV534LV adhesive is designed to cure through in 90 minutes with full property development within 24 hours at room temperature (77 °F/25 °C) and 50% relative humidity. This system is sensitive to changes in heat and humidity and therefore variations in cure speed may be seen if one or both variables are changed.

### **Compatibility**

RTV534LV adhesive will cure in contact with most clean and dry surfaces. Compatibility tests should be performed on all materials in contact with the uncured silicone, including painted surfaces.

### **Surface Preparation**

The adhesive performance of any polymer system is highly dependent upon proper surface preparation. In order to maximize the adhesion of the RTV534LV adhesive, all parts should be as clean and dry as possible prior to the application of the silicone.

### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information,

and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any Momentive representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with Momentive products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

### Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

### Contact Information

For product prices, availability, or order placement, contact our customer service at [Momentive.com/CustomerService/](http://Momentive.com/CustomerService/)

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.