

## RTV664

### Description

RTV600 series is comprised of RTV662, RTV664, and RTV668. Each is a two part, addition (platinum) curing mold making product offering high durometer for applications requiring greater dimensional stability.

RTV662 offers the highest durometer (68 Shore A) in the series, as well as the longest worklife. It is ideally suited for embossing, release rolls, and large molds.

RTV664 is a high durometer (62 Shore A), long work life product. It offers excellent chemical and abrasion resistance and was designed for high production on manufacturing lines.

RTV668 is a high durometer (62 Shore A) product formulated for sulfur resistance. It is ideal for casting with masters made of pine, oak, and elm.

### Key Features and Benefits

- Excellent dimensional stability
- High tear strength
- High durometers (62/68 Shore A)
- Virtually no shrinkage (room temperature cure)

### Typical Physical Properties

| Product Base   | RTV662A | RTV664A | RTV668A |
|----------------|---------|---------|---------|
| Color          | beige   | beige   | beige   |
| Viscosity, cps | 150,500 | 153,000 | 151,000 |

|                              |                |                |                |
|------------------------------|----------------|----------------|----------------|
| Specific Gravity             | 1.28           | 1.28           | 1.28           |
| <b>Catalyst</b>              | <b>RTV662B</b> | <b>RTV664B</b> | <b>RTV668B</b> |
| Color                        | blue           | blue           | green          |
| Viscosity, cps               | 5,000          | 6,000          | 3,800          |
| Specific Gravity             | 1.05           | 1.05           | 1.05           |
| Mix Ratio, wt:wt             | 10:1           | 10:1           | 10:1           |
| <b>Catalyzed Properties</b>  |                |                |                |
| Viscosity, cps               | 120,000        | 120,000        | 120,000        |
| Worklife, hours              | 4              | 2              | 2              |
| Potlife, hours               | 5              | 3              | 2.5            |
| Demold time, hours           | 24             | 18             | 24             |
| Shore A, 36 hours            | 68             | 62             | 62             |
| Tensile, psi                 | 1015           | 933            | 1041           |
| Elongation, %                | 235            | 245            | 240            |
| Tear, ppi                    | 136            | 122            | 100            |
| Service Temperature, °C (°F) | -60/200        | -60/200        | -60/200        |
|                              | (-75/392)      | (-75/392)      | (-75/392)      |
| Linear Shrinkage, %          | < 0.2          | < 0.2          | < 0.2          |

### Potential Applications

- Architectural and furniture molding
- Prototyping

### Processing Recommendations

#### Mixing

Select a mixing container 4-5 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. With clean tools, thoroughly mix the RTV base compound and the curing agent, scraping the sides and bottom of the container carefully to produce a homogenous 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 about 29 in. of mercury. 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.

Automatic equipment designed to meter, mix, deaerate, and dispense two-component RTV silicone rubber compounds will add convenience to continuous or large volume operations.

### **Curing**

RTV662, RTV664, and RTV668 silicone rubber compounds will cure sufficiently in 24 hours at 25C (77F). To achieve faster cure speeds, elevated temperatures may be used.

### **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 MPM 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 MPM 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.

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