

SILTRUST™ RTV421 MOLDMAKING SILICONE

Description

RTV421 is a two part, high strength, condensation (tin) cure moldmaking product. It offers mid durometer, low viscosity, and long worklife. This product is also suggested for use on high sulfur-bearing clay masters due to its excellent inhibition resistance. It can be used for block or glove molds.

Key Features and Typical Benefits

- Inhibition resistance to sulfur materials
- Low viscosity easy flow
- Superior detail reproduction
- High tear strength and flexibility

Typical Physical Properties

Property	Unit	Property
Color		beige
Viscosity	cps	40,000
Specific Gravity		1.26
Catalyst Beta 16		
Color		red
Viscosity, cps	cps	30
Specific Gravity		0.97
Mix Ratio	wt:wt	10:1
Catalyzed Properties		
Color, Mixed		Pink
Viscosity	cps	29,000
Worklife	minute	60
Potlife	minute	90
Demold time	hours	12
Shore A	36 hours	18
Shore A	24 hours	16
Tensile, psi	MPa (psi)	3.65 (530)
Elongation	%	400
Tear	(ppi)	2.32 (130)
Service Temperature	°C(°F)	-60/200 (-75/392)
Linear Shrinkage	% 24 hours	0.2
Linear Shrinkage	% 7 days	0.5

Typical properties are average data and should not be used as or to develop product specifications.

Potential Applications

- Art reproduction

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:** RTV421 with Beta 16 is designed to cure 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.

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 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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