

Technical Bulletin # 3068

**Product Description**

**MTV 1-5 BLUE** is a high tear strength, high elongation addition cure mold making RTV silicone rubber. **MRTV 1-5 BLUE** has low shrinkage and reproduces the most intricate detail.

**Properties Uncured**

	<u>PART A</u>	<u>PART B</u>
COLOR, VISUAL:	Blue	Clear
VISCOSITY, cps:	45,000	1,000
SPECIFIC GRAVITY:	1.12	1.00
MIX RATIO (by weight):	100:10	
MIXED VISCOSITY, cps:	25,000	
POT LIFE @ 25°C, hours:	1.5 - 2	
SHELF LIFE @ 25°C, months:	6	

**Properties Cured****PHYSICAL**

HARDNESS, DUROMETER (Shore A):	20-26	
TENSILE STRENGTH, psi:	450	ASTM D 412
TENSILE ELONGATION, %:	1,000	ASTM D 412
TEAR STRENGTH, Die B lb/in:	35	ASTM D 624
TEAR STRENGTH, Die C lb/in:	40	ASTM D 624
SERVICE TEMPERATURE RANGE, °C:	-55 to 200	
COEFFICIENT OF THERMAL EXPANSION, °C:	$4.2 \times 10^{-4}$	
THERMAL CONDUCTIVITY, BTU-in/(ft <sup>2</sup> )(hr)(°F):	0.18	

**Electrical**

DIELECTRIC STRENGTH, volts/mil:	550	ASTM D 149
DIELECTRIC CONSTANT, 1 KHz @ 25°C:	3.03	ASTM D 150
DISSIPATION FACTOR, 60 Hz @ 25°C:	0.002	ASTM D 150
VOLUME RESISTIVITY, ohm-cm:	$1.6 \times 10^{15}$	ASTM D 257

## Use Instructions

1. Pre-mix MRTV 1-5 BLUE base and curing agent before use to be sure any settled filler is reincorporated.
2. Weigh out amount of base component required for mold. Weigh into the base one part of catalyst for each 10 parts of MRTV 1-5 BLUE base.
3. Mix thoroughly, scraping both the bottom and side of the mixing container.
4. Place in a vacuum chamber and draw about 29 inches of mercury. The mixture will rise to about 3-4 times its original volume, then collapse. Hold the vacuum for another minute or two and release.
5. Proceed to pour mold.

## Special Notes

Certain materials may inhibit the cure of MRTV 1-5 BLUE when placed in contact with the mixed, uncured rubber. Materials such as amines, and amine-cured epoxies, sulfur containing materials, and condensation (tin cured) silicones are some which may cause inhibition. Even surfaces which have been in contact with such materials may also cause this condition. A patch test should be done if in doubt.

## Cure Schedule

16-24 hours @ Room Temperature (25°C)

3 - 4 hours @ 50°C

1 - 2 hours @ 65°C

## Date

08/2006

### **IMPORTANT:**

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### **HEALTH CAUTION:**

Avoid breathing possible fumes, mists and vapors which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clean water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

**PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION.  
FOR CHEMICAL EMERGENCY, CALL CHEMTREC (DAY OR NIGHT) 800 424-9300.**