



## Technical Data Sheet

### QM 262

*Quantum Silicones' 60 Durometer Addition Cure  
Moldmaking Material*

#### **Product Description**

Quantum Silicones' QM 262 is a two component, room temperature addition cure silicone material. The cured rubber has excellent mechanical properties and good shelf-life stability. This material is a good choice for the molding of furniture, picture frames and architectural materials. QM 262 has very good physical properties and resin resistance. In addition, this material is exceptionally good where high durometer and dimensional stability are required.

#### **Key Features**

- High Durometer
- Low Viscosity
- Casting resin resistance
- Fast demold time
- Excellent dimensional stability

#### **Main Applications**

- Molds for architectural replication
- Molds for polyester, epoxy resin casting, and rigid or foam polyurethane
- Molds for technical articles and prototypes
- Molds for furniture and picture frame replication

#### **Typical Properties**

<b>UNCATALYZED PROPERTIES</b>	
Mix Ratio	10:1 <b>by weight</b>
<b>BASE</b>	
Base Appearance	Beige
Base Viscosity, cps	45,000
Base Specific Gravity, g/cm <sup>2</sup>	1.26
<b>CATALYST</b>	
Catalyst Appearance	Blue
Catalyst Viscosity, cps	2,000
Catalyst Specific Gravity, g/cm <sup>2</sup>	1.02

## **Typical Properties Continued**

<b>CATALYZED PROPERTIES-QM 262</b>	
<b>PROPERTY</b>	<b>QM 262</b>
Catalyzed Color	Light Blue
Catalyzed Viscosity, cps	35,000
Pot Life <sup>(1)</sup> (minutes)	60 minutes
Demold Time(hours)	8 to 12 hours

<b>TYPICAL CURED PROPERTIES (3 DAYS @ 25C)</b>	
Durometer, Shore A	60
Tensile Strength, psi	>800
Elongation, %	~150
Tear B, ppi	>75
Linear Shrinkage, %	<0.1
Useful Temperature Range	-60C to 204C

(1)Pot Life is defined as the time at which the catalyzed viscosity has doubled.

## **Cure Characteristics**

The curing process begins as soon as the catalyst is mixed with the base. Under normal temperature (25C) and humidity (50% RH) conditions, the material will cure as described in the data above. Because this system is sensitive to heat and humidity, a change in cure speed may be seen if one or both of these variables are altered. Any large difference in temperature (+/-5C) or humidity (>60-70%) may change the cure profile of the material. In addition, if the product is to be used with aggressive resins such as high styrene polyester resins, it is recommended that the rubber be allowed to cure for 48 hours. For best results, QM 262A and QM 262B components of the **same lot number** should be used.

## **Mixing and De-aeration**

The following procedure should be followed for obtaining optimal performance from the QM 262.

Charge 100 parts, **by weight**, of QM 262A and 10 parts, **by weight**, of QM262B into a clean, compatible metal or plastic container. Shake the catalyst well before use. The volume of the container should be 3-4 times the volume of the material to be mixed. This allows for expansion of the siloxane material as it de-gasses.

Mix thoroughly by hand or with mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained. This will occur when the material takes on a uniform color with no visible striations. Once mixing \* is complete it is recommended that the material be de-aired 2-3 times by intermittent evacuation for a few minutes to minimize any imperfections due to bubbles in the cured material. Typically after releasing the vacuum 2-3 times the mass will collapse on itself at which time the vacuum should be left on only 2-4 minutes longer.

\* Machine mixed material does not normally need to be de-aired.

### **Shelf-life and Storage**

QM 262A and QM 262B should be stored in their original, sealed containers in an environment that does not exceed 90F. Under these conditions the expected shelf-life of the material is 12 months.

### **Not for Product Specification**

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call 1-800-852-3147.

Quantum Silicones  
8021 Reycan Rd  
Richmond, VA 23237  
Phone (804) 271-9010 Fax (804) 271-9055  
Customer Service (800)852-3147  
[www.quantumsilicones.com](http://www.quantumsilicones.com)