



## Technical Data Sheet

### QM Cat 135 SR2

Quantum Silicones' Condensation Cure  
Styrene Resistant Moldmaking Catalyst for QM 135

#### **Product Description**

Quantum Silicones' QM Cat 135 SR2 is a styrene resistant, two component, room temperature condensation cure catalyst for QM 135. This catalyst is our standard catalyst for QM 135 when casting polyester resins. The cured rubber has excellent mechanical properties and good shelf-life stability. For applications requiring slower cure, QM Cat Blue SR2 is available. However, Quantum Silicones recommends the utilization of QM Cat 135 SR2 for the best possible product performance.

#### **Key Features**

- Long work life
- Fast demold time
- Excellent physical properties and dimensional stability
- Excellent styrene resistance

#### **Main Application**

- Molds for polyester resin castings
- Molds where styrene resistance is required

#### **Typical Properties**

UNCURED PROPERTIES	
Appearance	Purple
Viscosity, cps	<150
Specific Gravity, g/cm <sup>2</sup>	1.00
Mix Ratio	10:1 <b>by weight</b>

CATALYZED PROPERTIES-QM CAT 135 SR2	
Catalyzed Color	Light Purple
Pot Life <sup>(1)</sup> (minutes)	~45 minutes
Tack-Free Time(hours)	4 to 6 hours
Demold Time(hours)	12 to 16 hours

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

#### **Final Properties**

See individual data sheet for QM 135.

## **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 resin, it is recommended that the rubber be allowed to cure for 48 hours.

## **Mixing and De-aeration**

The following procedure should be followed for obtaining optimal performance from the QM 135 and Cat 135 SR2.

Charge 100 parts, **by weight**, of the QM 135 and 10 parts, **by weight**, of QM Cat 135 SR2 into a clean, compatible metal or plastic container. Shake the catalyst well before use. The volume of the container should be 3 to 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 to 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 to 3 times the mass will collapse on itself at which time the vacuum should be left on only 2 to 4 minutes longer. For best results, machine mixing is recommended.

## **Shelf-life and Storage**

The QM 135 and QM Cat 135 SR2 should be stored in their original, sealed containers in an environment that does not exceed 90° F. Under these conditions the expected shelf-life of the material is 6 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)