



Technical Data Sheet

QM Cat Thixo 2

*Quantum Silicones' Thixotropic Condensation Cure
Moldmaking Catalyst*

Product Description

Quantum Silicones' QM Cat Thixo 2 is a two component, room temperature condensation cure catalyst for the QM 100 series. This catalyst exhibits non-slump behavior to ~1/2" while not changing the cured properties of the QM 100 series bases. Glove molding, lay-up molding, spray applications, or any application where a thixotropic moldmaking material is required would be ideal for this product. The cured rubber has excellent mechanical properties and good shelf-life stability. This technology is available with QM Cat Purple and QM Cat Clear.

Key Features

- Works well with QM 113, QM 118, QM 122, QM 128, QM 135, and QM 140
- Non-Slump to ~1/4" - 1/2" depending on the 100 base series used
- Fast demold time

Main Application

- Spray applications
- Glove molding
- Lay-up molding

Typical Properties

UNCATALYZED PROPERTIES		
Mix Ratio	10:1 by weight	
CATALYST	QM CAT PURPLE THIXO 2	QM CAT CLEAR THIXO 2
Appearance	Purple	Translucent
Viscosity, cps	1000	1000
Specific Gravity, g/cm ³	1.03	1.03

CATALYZED PROPERTIES-QM CAT THIXO 2		
CATALYST	QM CAT PURPLE THIXO 2	QM CAT CLEAR THIXO 2
Catalyzed Color	Light Purple	Same as base color- Beige/White
Work Time, minutes	~45 minutes	
Tack-Free Time, hours	4 to 6 hours	
Demold Time, hours	12 to 16 hours	

Final Properties

- See individual data sheets for QM 100 series.

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 100 series.

Charge 100 parts, **by weight**, of the QM 100 series base and 10 parts, **by weight**, of QM Cat Thixo 2 into a clean, compatible metal or plastic container. 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 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. The material should stand for 10 minutes for the full effect of the thixo catalyst to be realized.

Shelf-life and Storage

The QM 100 series base and QM Cat Thixo 2 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.

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