



QM 132T

30 Shore A, Translucent, Condensation Cure Moldmaking Material

PRODUCT DESCRIPTION

QM 132T is a two-component, translucent, room temperature, condensation cure silicone material. When catalyzed with QM Cat Clear Thixo 2, the resulting material is extremely thixotropic. QM 132T is also available for non-thixotropic, flowable applications when catalyzed with QM Cat Purple or QM Cat Purple SR 2. The cured rubber has excellent properties and good shelf life stability.

KEY FEATURES

- High tear strength
- Fast demold time
- Excellent dimensional stability
- Excellent styrene resistance, when used with QM Cat Purple SR 2

MAIN APPLICATIONS

• Molds for polyester, polyurethane and epoxy resin castings

TEST	QM 132T	QM Cat Purple	QM CAT Purple SR 2	QM CAT CLEAR THIXO 2
Color	Translucent	Purple	Purple	Translucent
Viscosity	50,000 cps	100 cps	100 cps	900 cps
Specific Gravity	1.11	1.00	1.00	1.03

TYPICAL PROPERTIES

PROPERTY	QM Cat Purple	QM CAT Purple SR 2	QM CAT CLEAR THIXO 2
Color	Translucent Purple	Translucent Purple	Translucent
Catalyzed viscosity	Flowable	Flowable	Thixotropic, easily workable
Specific Gravity	1.10	1.10	1.10
Work life at 25°C *	35 minutes	35 minutes	20 to 30 minutes
Tack-free time	4 - 6 hours	4 - 6 hours	3 - 5 hours
Demold time	12 - 16 hours	12 - 16 hours	8 - 12 hours

* Work life is defined as the amount of time required for the material to double in catalyzed viscosity.



CURED PROPERTIES 3 DAYS @ 25°C							
Durometer, Shore A	28 to 32	28 to 32	28 to 32				
Tensile Strength	> 500 psi	> 500 psi	~ 500 psi				
Elongation	> 450 %	> 450 %	~ 350 %				
Tear B	> 140 ppi	> 140 ppi	> 70 ppi				
Linear Shrinkage	< 0.3 %	< 0.3 %	< 0.3 %				
Useful Temperature Range	- 50°C − 150°C	- 50°C − 150°C	- 50°C – 150°C				

CURE CHARACTERISTICS

The standard catalyst for QM 132T is QM Cat Purple, QM Cat Purple SR 2 or QM Cat Clear Thixo 2 catalyzed 10:1 (base:catalyst) by weight. Faster cure can be obtained using DBT, STO or a higher level of QM Cat Purple, QM Cat Purple SR 2 or QM Cat Clear Thixo 2. However, rapid cure of condensation cure moldmaking rubber often results in a small sacrifice of physical properties or an increase in hardness.

The curing process begins as soon as the catalyst is mixed with the base. The material will cure as described in the data above under normal temperature (25°C) and humidity conditions (50% RH). Because this system is sensitive to heat and humidity, a change in cure speed may be observed if one or both of these variables are altered. A large difference in temperature (+/- 5°C) or humidity (> 60 - 70%) may alter 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.

MIXING

QM Cat Purple, QM Cat Purple SR 2 and QM Cat Clear Thixo 2 should be thoroughly mixed prior to use.

QSi recommends that the catalyzed material be tested on a small area of the mold prior to use.

QM 132T should be thoroughly mixed with the chosen catalyst using a 10:1 ratio (base:catalyst) by weight. Shake the catalyst well before use. Material should be mixed in 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-aeration.

Mix thoroughly by hand or with mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained.



DE-AERATION

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process, the material will expand and intermittent evacuation may be required. Typically after releasing the vacuum 2 - 3 times, the mass will collapse on itself at which time the vacuum should be left on for an additional 2 - 4 minutes.

STORAGE AND SHELF LIFE

This product is best when used within 12 months from date of manufacture. See product label and/or CoA for specific "Use By Date". Product should be stored in its original, unopened container in an environment that does not exceed 38°C (100°F). Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, the properties required for the intended use should be checked for quality assurance reasons.

DISCLAIMER

The technical data listed is provided for reference only and is not intended as product specifications. QSi has the capability to customize products as requested. For sales and technical assistance please contact customer service at (804) 271-9010 or 1-800-852-3147.

Please be sure to visit our website daily for our complete product portfolio, new product introductions and more! <u>www.quantumsilicones.com</u>

Quantum Silicones Headquarters 7820 Whitepine Road Richmond, VA 23237

Manufacturing, Research and Development Facility 8021 Reycan Road Richmond, VA 23237

> Phone: 804-271-9010 Fax: 804-271-9055 Toll Free: 800-852-3147