



Technical Data Sheet

QM Skin 30

5 Shore A, Condensation Cure Moldmaking Material

PRODUCT DESCRIPTION

QM Skin 30 is a two-component, room temperature, condensation cure, silicone material. The cured rubber is very soft, has excellent mechanical properties and very low bleed in addition to good shelf-life stability. This material is an excellent choice for the molding of intricate patterns, skin molding and applications where low durometer, translucent material is required

KEY FEATURES

- Low viscosity
- High elongation (> 1,000 %)
- Excellent retention of additional fluid
- Fast demold time
- Translucent and pigmentable

Complies with FDA indirect food contact regulation CFR 177.2600, when used with QM Cat Clear FG. Refer to QM Cat Clear FG data sheet for typical properties.

MAIN APPLICATIONS

- Special effects
- Skin replication
- Applications where pigmentation is required

TYPICAL PROPERTIES

UNCATALYZED		
PROPERTY	QM Skin 30	QM Cat Skin 30
Color	Translucent	Translucent
Viscosity	50,000 cps	100 cps
Specific Gravity	1.12	1.00

CATALYZED	
MIX RATIO 10:1 by weight	
PROPERTY	QM Cat Skin 30
Color	Translucent
Viscosity	30,000 cps
Specific Gravity	1.12
Work life at 25°C *	42 minutes
Tack-free time	8 - 12 hours
Demold time	16 - 24 hours

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



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CURED PROPERTIES	
3 DAYS @ 25°C	
Durometer, Shore A	5
Tensile Strength	350 psi
Elongation	1,000 %
Tear B	95 ppi
Linear Shrinkage	< 0.30 %

CURE CHARACTERISTICS

The standard catalyst for QM Skin 30 is QM Cat Skin 30 catalyzed at a 10:1 ratio (base:catalyst) by weight. Faster cure can be obtained using DBT or a higher level of QM Cat Skin 30. However, rapid cure of condensation cure moldmaking materials can often result 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

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

QM Skin 30 should be thoroughly mixed with QM Cat Skin 30 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 during de-aeration.

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.

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.



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STORAGE AND SHELF LIFE

If QM Skin 30 and QM Cat Skin 30 are stored in their original unopened containers, in an environment that does not exceed 38°C (100°F) then QSi will warranty the material for a period of 6 months from the date of shipment.

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.

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