



Technical Data Sheet

8021 Reycan Road
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QM True Skin 50 50 Shore 00 Addition Cure Material

PRODUCT DESCRIPTION

QM True Skin 50 is a two-component, one-to-one mix ratio, heat cured, addition-cure silicone material. The cured rubber is very soft, has excellent mechanical properties, low fluid bleed and good shelf-life stability. This material is an outstanding choice for skin molding and applications where a low durometer and high elongation, translucent material is required.

KEY FEATURES

- Low viscosity
- High elongation
- Excellent toughness
- Fast demold time
- Translucent and pigmentable

MAIN APPLICATIONS

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

TYPICAL PROPERTIES

UNCATALYZED		
TEST	QM True Skin 50 A	QM True Skin 50 B
Appearance	Translucent	Translucent
Viscosity	15,000 cps	15,000 cps
Specific Gravity	1.05	1.05

CATALYZED	
MIX RATIO 1:1 by weight	
PROPERTY	QM True Skin 50
Catalyzed color	Translucent
Gel Time*	105 minutes

*Gel Time is defined as the time at which the catalyzed material gels.



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CURED PROPERTIES	
30 min at 90C	
PROPERTY	RESULT
Durometer, Shore 00	48
Tensile	325 psi
Elongation	835%
Tear	30 ppi
Linear Shrinkage	< 0.1%
100% Modulus	27
200% Modulus	45
300% Modulus	79

CURE CHARACTERISTICS

QM True Skin 50 A is catalyzed with QM True Skin50 B at a 1:1 ratio by weight. In order to achieve optimum performance the same lot number of QM True Skin 50 A and QM True Skin 50 B should be used.

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 (25C) 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 (+/- 5C) or humidity (> 60-70%) may alter the cure profile of the material.

MIXING

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

QM True Skin 50 A and QM True Skin 50 B should be thoroughly mixed prior to catalyzation.

Combine one part of QM True Skin 50 A with one part of QM True Skin 50 B by weight into a clean, compatible container and mix by hand or with mixing equipment until a uniform consistency is observed. When hand mixing; accurate weighing of components on a suitable scale is essential for optimal product performance. The material should have 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.

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



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STORAGE AND SHELF LIFE

If QM True Skin 50 A and QM True Skin 50 B are stored in their original unopened containers, in an environment that does not exceed 38C (100F) then QSi will warranty the material for a period of 12 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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