Technical Data Sheet

QM 240T
40 Shore A, Translucent, Addition Cure Moldmaking Material

PRODUCT DESCRIPTION
QM 240T is a two-component, room temperature, addition cure, silicone material. The cured rubber has excellent mechanical properties and good shelf-life stability. This material has been designed for the prototyping industry. However, it is also a good choice for molding of furniture, picture frames and architectural materials.

KEY FEATURES
- Translucent
- Casting resin resistance
- Fast demold time
- Excellent dimensional stability

MAIN APPLICATIONS
- Rapid prototyping
- Molds for architectural replication
- Molds for polyester, epoxy resin casting, and rigid or foam polyurethane
- Molds for technical articles and prototypes
- Molds for furniture and picture frame replication

TYPICAL PROPERTIES

UNCATALYZE		
TEST	**QM 240T A**	**QM 240T B**
Appearance	Translucent	Clear
Viscosity	85,000 cps	2,500 cps
Specific Gravity	1.10	0.98

CATALYZE MIX RATIO 10:1 by weight	
PROPERTY	**RESULT**
Catalyzed color	Translucent
Catalyzed viscosity	60,000 cps
Work life at 25°C *	45 minutes
Demold time	18 - 24 hours

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

CURED 3 days at	
PROPERTY	**RESULT**
Durometer, Shore A	40
Tensile	900 psi
Elongation	350 %
Tear	120 ppi
Linear Shrinkage	< 0.1 %
Useful temperature range	- 55°C - 204°C

CURE CHARACTERISTICS
QM 240T A is catalyzed with QM 240T B at a 10:1 ratio by weight. In order to achieve optimum Performance, the same lot number of QM 240T A and QM 240T 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 (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.

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

Combine ten parts of QM 240T A with one part of QM 240T B by weight into a clean, compatible container and mix by hand or with mixing equipment until a uniform consistency is observed. 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.

STORAGE AND SHELF LIFE

This product is best when used within 24 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**.

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