# **Technical Data Sheet**



## **Stretch FX**

22 Shore A, Addition Cure, Translucent Moldmaking Material

### PRODUCT DESCRIPTION

Stretch FX is a two-component, room temperature, addition cure, silicone material. The cured rubber has excellent mechanical properties and good shelf-life stability. This material is a good choice for moldmaking of intricate patterns, skin molding and applications where a low durometer translucent material is required.

### **KEY FEATURES**

- Low viscosity
- Fast demold time
- Elongation > 1200%
- Excellent flexibility
- Translucent, pigmentable

### MAIN APPLICATIONS

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

## **TYPICAL PROPERTIES**

UNCATALYZED			
TEST	Stretch FX A	Stretch FX B	
Appearance	Translucent	Translucent	
Viscosity	25,000 cps	2,000 cps	
Specific Gravity	1.12	0.98	

CATALYZED		
MIX RATIO 10:1 by weight		
PROPERTY	RESULT	
Catalyzed color	Translucent	
Catalyzed viscosity	10,000 cps	
Work life at 25°C *	32 minutes	
Demold time	6 - 8 hours	

<sup>\*</sup> Work life is defined as the time required for the material to double in catalyzed viscosity.

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CURED PROPERTIES		
PROPERTY	RESULT	
Durometer, Shore A	22	
Tensile	500 psi	
Elongation	1,200 %	
Tear B	100 ppi	
Linear Shrinkage	< 0.1 %	
Useful temperature range	- 60°C - 204°C	

### **CURE CHARACTERISTICS**

Stretch FX A is catalyzed with Stretch FX B at a 10:1 ratio (base:catalyst) by weight. In order to achieve optimum performance the same lot number of Stretch FX A and Stretch FX 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 ( $\pm$ -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

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

Combine ten parts of Stretch FX A with one part of Stretch FX 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.

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## STORAGE AND SHELF LIFE

If Stretch FX A and Stretch FX B 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 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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> **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

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