



Technical Data Sheet

QSIL210

Quantum Silicones 10 Shore A Addition Cure Elastomer

Product Description

Quantum Silicones QSIL210 is a two component, room temperature addition cure silicone material. The cured rubber is very soft, has excellent mechanical properties, very low fluid bleed and good shelf-life stability. This material is an outstanding choice for casting soft durable skin like shapes and applications where a low durometer, translucent material is required.

Key Features

- Low viscosity
- High elongation (> 800)
- Excellent retention of additional fluid
- Fast demold time
- Clear and pigmentable

Main Application

- Special Effects
- Skin replication
- Applications where pigmentation or high elongation is required

Typical Properties

UNCATALYZED PROPERTIES	
Mix Ratio	10:1 by weight
BASE	
Base Appearance	QSIL210 A Translucent
Base Viscosity, cps	70,000 cps
Base Specific Gravity, g/cm ²	1.10
CATALYST	
Catalyst Appearance	QSIL210 B Transparent
Catalyst Viscosity, cps	4,000
Catalyst Specific Gravity, g/cm ²	1.00

Typical Properties Continued

CATALYZED PROPERTIES-QSIL210	
PROPERTY	QSIL210
Catalyzed Color	Translucent
Catalyzed Viscosity, cps	38,000cps
Pot Life ⁽¹⁾ (minutes)	60 minutes
Tack-Free Time (hours)	8 hours
Demold Time (hours)	24 hours

TYPICAL CURED PROPERTIES (3 DAYS @ 25C)	
Durometer, Shore A	10
Tensile Strength, psi	330
Elongation, %	800
Tear B, pli	35
Linear Shrinkage, inches	<0.1

(1)Pot Life is defined as the time at which the catalyzed viscosity has doubled.

Cure Characteristics

The curing process begins as soon as the catalyst is mixed with the base. Under normal temperature (25C) conditions, the material will cure as described in the data above. Because this system is sensitive to heat, cure speed will increase with increased temperature. In addition, if the product is to be used with aggressive resins such as high styrene polyester resin, it is recommended that the rubber be allowed to cure for 48 hours.

The catalyst for QSIL210 is mixed with part A at a 10% level **by weight**.

Mixing and De-airation

The following procedure should be followed for obtaining optimal performance from the QSIL210

Charge 100 parts, **by weight**, of Part A and 10 parts, **by weight**, of Part B into 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-gasses.

Mix thoroughly by hand or with clean mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained. Once mixing is complete it is recommended that the material be vacuum de-aired until the material rises collapse on itself, at which time the vacuum should be left on only 2-4 minutes longer.

Shelf-life and Storage

QSIL210 A/B should be stored in the original, sealed containers. Under these conditions the expected shelf life of the material is 12 months.

Not for Product Specification

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call 1-800-852-3147.

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