



## Technical Data Sheet

### QGel 311

Quantum Silicones' General Purpose Silicone Gel

#### **Product Description**

QGel 311 is a clear, fast cure, moderately cross-linked silicone polymer. Silicone gels are used to provide protection from vibration, thermal or mechanical shock. Silicone gels also provide excellent moisture protection. QSi's QGel product line are two component materials with a 1:1 mix ratio.

#### **Key Features**

- One to one mix ratio
- 90 minute room temperature cure
- 5 minute cure @ 150°C
- Soft but resilient gel
- Designed for automatic mixing and dispensing

#### **Typical Properties**

<b>Uncatalyzed Properties</b>		
	<b>"A" Component</b>	<b>"B" Component</b>
Appearance	Transparent	Transparent
Viscosity, cps	1,000	1,000
Specific Gravity	0.97	0.97

<b>Catalyzed Properties</b>	
Mix Ratio	1:1
Pot Life, 25°C	3 minutes
Cure Time	5 min @ 150°C
	10 min @ 100°C
	90 minute @ 25°C
Volatiles, %	0.1 max. (cured sample)
Service Temperature Range	-55 to 200°C
Adhesion	Silicone gels have a tacky surface and will form a mechanical bond to most substrates
Penetration, mm	7 (5-9range)

## **Electrical properties**

QGels have excellent dielectric strength

## **Instructions for use**

### **Mixing**

The convenient one to one mix makes QSi's QGels very easy to mix. Mix equally and thoroughly by weight or volume. Once the components are mixed the curing process begins. The pot life of the mixed material is shown under typical properties. Fast curing gels (less than 30 minutes pot life) should be dispensed utilizing automated mix and dispense equipment.

### **De-aeration**

Air trapped during mixing should be removed to eliminate voids in the cured product. Vacuum de-airing may be necessary to completely remove all entrapped air bubbles. To insure proper de-airing, subject the mixed material to 29 inches of mercury.

### **Storage and shelf life**

QGels should be stored in the original unopened container at 25C (77F). They will remain useful for a period of 12 months if stored under those conditions.

### **Not for Product Specification**

This product is for industrial use only. 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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