



Technical Data Sheet

Tuf-Gel 331

Quantum Silicones' High Strength Gel

Product Description

Tuf-Gel 331 is a Blue-tinted, clear, tough, moderately cross-linked silicone elastomer which has good, room temperature cure adhesion to many substrates. This material also has enhanced flame retardant properties compared to standard gels. Silicone gels are used to provide protection from vibration, thermal or mechanical shock. Silicone gels also provide excellent moisture protection.

Key Features

- High Strength
- Enhanced FR properties
- 1:1 mix ratio
- 24 hour room temperature cure
- 30 minute cure at 150°C
- Dispensing equipment not necessary
- Good adhesion to many substrates including glass, aluminum and copper

Typical Properties

Uncatalyzed Properties		
	“A” Component	“B” Component
Appearance	Transparent	Blue, transparent
Viscosity, cps	700	700
Specific Gravity	0.97	0.97

Catalyzed Properties	
Mix Ratio	1:1
Pot Life, 25°C	>35 minutes, typically 60 minutes
Cure Time	30 min @ 150°C
	60 min @ 100°C
	24 hours @ 25°C
Service Temperature Range	-55 to 200°C
Adhesion	Silicone gels have a tacky surface and will form a mechanical bond to most substrates
Shore 00	30-50, typically 40

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.

Quantum Silicones
8021 Reycan Rd
Richmond, VA 23237
Phone (804) 271-9010 Fax (804) 271-9055
Customer Service (800)852-3147
www.quantumsilicones.com