



Technical Data Sheet

TufGel 331

High Strength Silicone Gel

PRODUCT DESCRIPTION

TufGel 331 is a blue-tinted, 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 and thermal or mechanical shock. Silicone gels also provide excellent moisture protection.

KEY FEATURES

- One to one mix ratio
- Enhanced flame retardant properties
- Dispensing equipment not necessary
- Good adhesion to many substrates including glass, aluminum and copper with primer

TYPICAL PROPERTIES

UNCATALYZED		
TEST	TufGel 331 A	TufGel 331 B
Appearance	Transparent	Blue
Viscosity	700 cps	700 cps
Specific Gravity	0.97	0.97

CATALYZED	
MIX RATIO 1:1	
TEST	RESULT
Gel Time at 25°C *	> 35 minutes

* Gel time is defined as the time required for the material to become a solid or a semi-solid.

CURED PROPERTIES	
Cure Profile	30 minutes at 150°C
	60 minutes at 100°C
	24 hours at 25°C
Durometer, shore 00, 24 hours at 25°C	30 - 50
Durometer, shore 00, 30 minutes at 90°C	30 - 50

ADDITIONAL PROPERTIES	
Service Temperature Range	-55°C - 204°C
Adhesion	Silicone gels have a tacky surface and will form a mechanical bond to most substrates.
Electrical Properties	Excellent dielectric strength



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MIXING

TufGel 331 should be thoroughly mixed using a 1:1 ratio by weight or by volume. Once the components are mixed the curing process begins. The gel time of the mixed material is listed above under typical properties. Fast curing gels (less than 30 minute gel time) 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 ensure proper de-airing, subject the mixed material to 29 inches of mercury.

STORAGE AND SHELF LIFE

If TufGel 331 A and TufGel 331 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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