Technical Data Sheet



8021 Reycan Road Richmond, VA 23237 Phone: 804-271-9010 FAX: 804-271-9055 Toll free: 800-852-3147

QGel 311 General Purpose Silicone Gel

PRODUCT DESCIRPTION

QGel 311 is a clear, fast cure, tough moderately cross-linked silicone polymer. 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
- 90 minute room temperature cure
- 5 minute cure @ 150°C
- Soft but resilient gel
- Designed for automatic mixing and dispensing

TYPICAL PROPERTIES

UNCATAYLZED			
TEST	A	В	
Appearance	Transparent	Transparent	
Viscosity	1000 cps	1000 cps	
Specific Gravity	0.97 g/cm ³	0.97 g/cm ³	

CATAYLZED			
MIX RATIO 1:1			
TEST	RESULT		
Gel Time, 25C	3 minutes		

CURED PROPERTIES		
Cure Profile	5 minutes at 150C	
	10 minutes at 100C	
	90 minutes at 25C	
Penetration, 30 minutes at 150C	5 - 9 mm	

ADDITIONAL PROPERTIES		
Service Temperature Range	-55 to 200C	
Adhesion	Silicone gels have a tacky surface and will form a mechanical bond to most substrates.	
Electrical Properties	Excellent dielectric strength	

1 REV-0

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MIXING

QGel 311 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. Mixing equipment is recommended for this grade.

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 deairing, subject the mixed material to 29 inches of mercury.

STORAGE AND SHELF LIFE

If QGel 311A and QGel 311B are in an environment that does not exceed 25C (77F) then QSi will warranty the material for a period of one year 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.

Visit our website at www.quantumsilicones.com.

2 REV-0