



Technical Data Sheet

QGel 313 Custom Silicone Gel

PRODUCT DESCRIPTION

QGel 313 is a clear, soft, tough, moderately cross-linked silicone polymer. This product is a two-component material with a 20:1 mix ratio by weight or by volume. It can also be mixed at a 10:1 ratio by weight or by volume which will yield a harder gel.

KEY FEATURES

- 20:1 mix ratio
- Greater than 7 day room temperature work life
- Dispensing equipment not necessary
- Heat cure required

TYPICAL PROPERTIES

UNCATALYZED		
TEST	QGel 313 A	QGel 313 B
Appearance	Transparent	Transparent
Viscosity	310 cps	220 cps
Specific Gravity	0.97	0.97

CATALYZED	
MIX RATIO 20:1	
TEST	RESULT
Gel Time at 25°C *	> 7 days

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

CURED PROPERTIES	
60 Minutes at 150°C	
Penetration, 20:1, 30 minutes at 150°C	3 - 7 mm
Durometer, 10:1 Shore 00, 30 minutes at 150°C	46 - 52

ADDITIONAL PROPERTIES	
Service Temperature Range	-55°C - 204°C
Adhesion	QGel 313 requires the use of a primer to obtain effective adhesion.
Electrical Properties	Excellent dielectric strength



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MIXING

QGel 313 should be thoroughly mixed using a 20:1 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.

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 QGel 313 A and QGel 313 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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