



## Technical Data Sheet

### QSi 219

Quantum Silicones' Transparent Liquid Silicone Rubber

#### **Product Description**

QSi 219 is a 2 part, clear liquid silicone which will cure at room temperature or at elevated temperatures. This product meets Mil-I-81550C(type II) and is supplied in matched kits in a 10 to 1 ratio of A to B.

#### **Key Performance Properties**

- Meets Mil-I-81550C, type II
- Convenient 10:1 mixing ratio for use in automatic dispensing equipment or hand mixing
- Low viscosity which allows for ease of flow around complex parts, providing electrical insulation and shock resistance
- Contains no solvents
- Non-yellowing catalyst system
- The chemical composition provides hydrolytic stability and reversion resistance

#### **Uncured Properties**

	<b><u>QSi 219A</u></b>	<b><u>QSi 219B</u></b>
Color	Clear	Clear
Viscosity, cps	4000	500
Specific Gravity	1.02	1.00

#### **Typical Uncured Properties with curing agent added**

Color	Clear, colorless
Consistency	Easily pourable
Work Time	5-8 hours

#### **Typical Cured Properties (cured 1 hour @ 100°C/212°F, 10:1 mix A:B)**

Hardness, Shore A	40
Tensile Strength, psi	750
Elongation, %	100
Shrinkage	~0.1
Refractive Index	1.406

### **Typical Electrical Properties**

Dielectric Strength, v/mil	500
Dielectric Constant @ 1000Hz	2.69
Dissipation Factor @ 1000Hz	0.0006
Volume resistivity, ohm- cm	$1.7 \times 10^{15}$

### **Typical Thermal Properties**

Useful Temperature Range	-60 to 200C
Thermal Conductivity, Wm-K	0.18
Coefficient of Expansion	$27.5 \times 10^{-5}$
Specific Heat, cal/gm, C	0.3

All data is typical data and should not be used for specifications. Please contact a technical representative of Quantum Silicones for assistance.

### **Instructions for Use**

#### **Mixing**

Weigh 10 parts of A to 1 part of B. The mixing container should be 4 to 5 times larger than the volume of silicone. Using clean tools, thoroughly mix the A and B components. Air entrapped during mixing should be removed using vacuum equipment capable of achieving a vacuum of 29 inches of mercury.

#### **Storage and Shelf Life**

QSil 219 should be stored in the original unopened container at 25C (77F). It will remain useful for a period of 12 months if stored under those conditions.

#### **Not for Product Specification**

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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