



Technical Data Sheet

QSi 218

Quantum Silicones' Transparent Liquid Silicone Rubber

Product Description

QSi 218 is a 2 part, clear liquid silicone which will cure at room temperature or at elevated temperatures. This product is supplied in matched kits in a 10 to 1 ratio of A to B.

Key Performance Properties

- 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

	<u>QSi 218A</u>	<u>QSi 218B</u>
Color	Clear	Clear
Viscosity, cps	3,850	530
Specific Gravity	1.02	1.00

Uncured Properties with curing agent added

Color	Clear, colorless
Consistency	Easily pourable
Work Time	~6 hours

Cured Properties (cured 1 hour @ 100°C/212°F)

Hardness, Shore A	59
Tensile Strength, psi	968
Elongation, %	107
Shrinkage	~0.1
Refractive Index	1.406

Cure Schedule

Temperature, C	Time
150C	30 minutes
100C	60 minutes
60C	180 minutes

Electrical Properties

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

Thermal Properties

Useful Temperature Range	-60 to 200C
Thermal Conductivity, Wm-K	0.18
Coefficient of Expansion	27.5×10^{-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 218 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.

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