



Technical Data Sheet

QSi 223

Quantum Silicones' Transparent Liquid Silicone Rubber

Product Description

QSi 223 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 1 to 1 ratio of A:B.

Key Performance Properties

- Convenient 1:1 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

<i>Uncured Properties</i>		
	<u>QSi 223A</u>	<u>QSi 223B</u>
Color	Clear	Clear
Viscosity, cps	3,200	2,400
Specific Gravity	1.03	1.03

<i>Uncured Properties with Curing Agent Added</i>	
Color	Clear, colorless
Consistency	Easily pourable
Work Time	~2 hours

<i>Cured Properties</i>	
Hardness, Shore A 24H at room temp	51
Hardness, Shore A 1H @ 70C	53
Hardness, Shore A 1H @ 150C	65
Shrinkage	~0.1
Refractive Index	1.406

<i>Electrical Properties</i>	
Dielectric Strength, v/mil	500
Dielectric Constant @ 1000Hz	2.69

Dissipation Factor @ 1000Hz	0.0006
Volume resistivity, ohm-cm	1.7×10^{15}

<i>Thermal Properties</i>	
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

<i>Optical Properties</i>	
Refractive Index, 589nm	1.405
Transmittance, 400nm, 1mm path	>98.0%

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 223 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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