



Technical Data Sheet

QLE 1103 Specialty Silicone Coating

PRODUCT DESCRIPTION

QLE 1103 is a low viscosity, two-component, addition cure, silicone elastomer.

KEY FEATURES

- Fast cure at elevated temperatures
- Low linear shrinkage
- Transparent, ideal for pigmentation
- Low viscosity
- Long open time

TYPICAL PROPERTIES

UNCATALYZED		
PROPERTY	QLE 1103 A	QLE 1103 B
Appearance	Transparent	Transparent
Viscosity	2,000 cps	2,000 cps
Specific Gravity	1.02	1.02

CATALYZED	
MIX RATIO 1:1 by weight	
PROPERTY	RESULT
Gel time at 25°C *	> 24 hours

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

CURED PROPERTIES**	
Durometer, Shore A	45
Tensile	800 psi
Elongation	200 %
Thermal conductivity	0.18 W/m-K
Refractive index	1.40
Useful temperature range	- 55°C – 204°C

** For physical property testing, these materials have been cured in a closed mold at extended times to ensure full cure. When cured in an open environment, the cure time will be faster than in a closed mold, at the same temperatures. It is recommended that the material cure profile be optimized for the environment it will ultimately be used in.

CURE PROFILE	
TEMPERATURE	TIME
150°C	10 minutes
100°C	30 minutes



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MIXING

In order to achieve optimum performance the same lot number of QLE 1103 A and QLE 1103 B should be used.

Mixing by hand:

Catalyze QLE 1103 A with QLE 1103 B at a 1:1 ratio by weight or volume using a clean plastic or metal container of approximately 3 times the volume of the material and mix by hand. Accurate weighing of all components, on a suitable scale, is essential for optimal product performance when mixing by hand. Mix until the material is uniform with no visible striations.

Mixing and dispensing with automatic equipment:

Use a mixing system that will properly mix the QLE 1103 A and QLE 1103 B at a 1:1 ratio by weight.

DE-AERATION

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process, the material will expand and intermittent evacuation may be required.

STORAGE AND SHELF LIFE

If QLE 1103 A and QLE 1103 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.



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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**.

Please be sure to visit our website daily for our complete product portfolio, new product introductions and more! www.quantumsilicones.com

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