Technical Data Sheet



QLE 1101 Blue

Specialty Silicone Coating

PRODUCT DESCRIPTION

QLE 1101 Blue is a low viscosity, two-component, addition cure, silicone elastomer.

KEY FEATURES

- Fast cure at elevated temperatures
- Low linear shrinkage
- Tinted to differentiate A and B components
- Low viscosity

TYPICAL PROPERTIES

UNCATALYZED			
PROPERTY	QLE 1101 Blue A	QLE 1101 Blue B	
Appearance	Transparent	Blue	
Viscosity	2,000 cps	2,000 cps	
Specific Gravity	1.02	1.02	

CATALYZED			
MIX RATIO 1:1 by weight			
PROPERTY	RESULT		
Work life at 25°C *	11 hours		

* Work life is defined as the time required for the material to double in viscosity.

CURED PROPERTIES		
Durometer, Shore A	45	
Tensile	800 psi	
Elongation	125 %	
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 1101 Blue A and QLE 1101 Blue B should be used.

Mixing by hand:

Catalyze QLE 1101 Blue A with QLE 1101 Blue B at a 1:1 ratio by weight 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 1101 Blue A and QLE 1101 Blue 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.

Machine mixed material does not normally need to be de-aired.

STORAGE AND SHELF LIFE

If QLE 1101 Blue A and QLE 1101 Blue 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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