



# Technical Data Sheet

## QLE 1051

70 Shore A, Addition Cure, Self-Bonding, One Part Siloxane Elastomer

### PRODUCT DESCRIPTION

QLE 1051 is a one-component, self-bonding elastomer designed for use in semi-conductor applications. The material has excellent adhesion to many substrates.

### KEY FEATURES

- 100% solids
- Two hour cure time at 150°C
- Fast cure at elevated temperatures
- Primerless adhesion to a variety of substrates
- Medium viscosity

### TYPICAL PROPERTIES

UNCATALYZED	
PROPERTY	QLE 1051
Appearance	White
Viscosity	14,500 cps
Specific Gravity	1.50

CURED PROPERTIES*	
60 minutes @ 150°C	
PROPERTY	RESULT
Durometer, Shore A	75
Tensile	900 psi
Elongation	100 %
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.

ELECTRICAL PROPERTIES**	
Dielectric constant	2.8
Dissipation Factor	0.017
Volume resistivity	$7 \times 10^{14}$ ohm-cm

\*\*The times and temperatures listed above are reported with regard to full property formation and maximum adhesion to aluminum. Other substrates may require modified cure times/temperatures to obtain maximum adhesion.



## Technical Data Sheet

### USE and APPLICATION

This material is a one-component, translucent, heat-cured silicone elastomer. The material should only be used on clean surfaces to maximize adhesion properties. In addition, some substrates may be difficult to bond to and some, such as galvanized metal, may cause cure inhibition. When this occurs, a primer can be used to eliminate this problem.

### STORAGE AND SHELF LIFE

If QLE 1051 is stored in an environment that does not exceed 40°F then QSi will warranty the material for a period of 6 months from the date of shipment.

### 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](http://www.quantumsilicones.com)*

**Quantum Silicones Headquarters**  
*7820 Whitepine Road*  
*Richmond, VA 23237*

**Manufacturing, Research and Development Facility**  
*8021 Reycan Road*  
*Richmond, VA 23237*

**Phone: 804-271-9010**  
**Fax: 804-271-9055**  
**Toll Free: 800-852-3147**