Technical Data Sheet

QSil 244

45 Shore A, Thermally Conductive, Industrial Silicone Elastomer

PRODUCT DESCRIPTION

QSil 244 is a 100% silicone solids elastomer designed for industrial applications where good thermal conductivity is required. These applications include rollers, electronic potting applications, thermal interface materials (TIM) and thermally conductive coatings. This two-component system offers a hard, thermally conductive, low modulus material that is readily repairable.

KEY FEATURES

- 100% solids, no solvents
- Excellent thermal conductivity
- Heat cure required

TYPICAL PROPERTIES

UNCATALYZED		
TEST	**QSil 244 A**	**QSil 244 B**
Appearance	Brown	Brown
Viscosity	140,000 cps	140,000 cps
Specific Gravity	2.20	2.20

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

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

CURED PROPERTIES	
30 Minutes at 150°C	
TEST	**RESULT**
Durometer	45
Tensile	225 psi
Elongation	75 %

ADDITIONAL PROPERTIES	
Thermal conductivity	~ 0.84 W/m-K
Flammability	Excellent properties consistent with UL94 V-0/V-1 rating depending on thickness. This material is not currently UL listed.
Useful temperature range	- 55°C – 204°C

Curing*	
Time	**Temperature, °C**
20 minutes	150°C
40 minutes	120°C

*Material will not cure at room temperature and may not reach full physical properties if cured below the minimum recommended cure temperature. These are recommended cure times only with actual cure times and temperatures dependent on the quantity of material being used and the shape of the part being made.

MIXING

Mixing by hand:
Combine equal parts of QSil 244 A and QSil 244 B by weight and stir until a uniform consistency is observed. Use care when mixing to minimize air entrapment.

Mixing with dispensing or automatic equipment:
Use equipment suitable for a 1:1 mix ratio that will completely mix QSil 244 A and QSil 244 B to uniform consistency.

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.
Typically after releasing the vacuum 2 - 3 times, the mass will collapse on itself at which time the vacuum should be left on for an additional 2 - 4 minutes.

STORAGE AND SHELF LIFE

If QSil 244 A and QSil 244 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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