



## QSi 559

### *Silicone Potting Material Data Sheet*

#### **Product Description**

QSi 559 is a 100% silicone solids elastomer designed for electronic potting applications. 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

#### **Properties (041001)**

##### Uncatalyzed Properties

	“A” component	“B” component
Viscosity, cps	15,000	1,000
Appearance	Red	Clear
Specific Gravity	2.35	0.96
Mix Ratio (by weight)	100:5	
Catalyzed Viscosity, cps	9,700	
Pot Life (gel time)	1.5 hours	

##### Catalyzed Properties (cured 15 minutes @ 150C)

Durometer, shore A	62
Tensile, psi	437
Elongation, %	41
Service Temperature, °C	-55 to 260

##### Flammability (based on similar product performance)

UL 94 \*

3.0mm	V-0
1.5mm	V-1

Thermal conductivity

W/m K ~1.45

Electrical Properties\*

Dielectric Strength, V/mil 500  
Dielectric Constant (1000Hz) 4.5  
Volume Resistivity, Ohm-cm  $5 \times 10^{14}$

**Mixing**

Thoroughly stir both A and B components **PRIOR** to mixing together. Heavy settling may occur in the pails due to its heavy specific gravity and they need to be mixed or stirred before mixing the A & B together.

Mixing by hand

Combine equal parts of A and B component by weight and stir until completely mixed. Use care when mixing to minimize air entrapment.

Mixing and dispensing with automatic equipment

Use properly ratioed equipment for a 100:5 mix ratio. Also use a mixing system that will properly mix A and B components. Once mixed properly the material will have an 90 minute pot life

**Storage and Shelf Life**

QSil 559 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 and each component should be thoroughly mixed before use.