

# 20-1634

## LIGHTWEIGHT SILICONE POTTING AND ENCAPSULATING COMPOUND

### DESCRIPTION:

20-1634 is a low density, two component silicone elastomer. The 20-1634 is less than half the weight of most commercially available potting and encapsulating compounds.

20-1634 utilizes an advanced micro balloon technology filler. This system is ideal for applications that require low weight, flexibility, high heat resistance, and excellent electrical insulation properties.

20-1634 is formulated without solvents or other toxic materials. It is therefore not regulated or considered hazardous for transportation.

### FEATURES:

- Low density
- Flexible
- Deep section curing (beyond 1-2 inches)
- High operating temperatures
- Solvent free

### BENEFITS:

- Does not add much weight to products
- Low stress on components and vibration resistant
- No need for multiple pours due to low exotherm
- Good protection in extreme environmental applications
- No by-products released during cure and safe to handle

### TYPICAL SPECIFICATIONS:

Color	
Resin (Part A)	White
Activator (Part B)	Clear
Viscosity, @ 25°C, cps	
Resin (Part A)	45,000
Activator (Part B)	100
Mixed	30,000
Specific Gravity, @ 25°C	
Resin (Part A)	0.80
Activator (Part B)	0.97
Mixed	0.82
Pot Life, 25°C, 100 grams	1 Hour
Hardness, Shore A	34
Elongation, %	225
Tensile Strength, psi	125
Tear Strength, pli	16.5
Thermal Conductivity, btu·in/hr·ft <sup>2</sup> ·°F	1.1
Coefficient of Thermal Expansion, per °C	2 x 10 <sup>-4</sup>

**TYPICAL SPECIFICATIONS (continued):**

Volume Resistivity, ohm-cm, 25°C	1 x 10 <sup>14</sup>
Dielectric Constant @ 100 Hz	3.1
Dielectric Strength, V/mil	450
Operating Temperature, °C	-65 to +235

**INSTRUCTIONS FOR USE:**

1. Mix base and hardener separately since some settling of fillers may occur.
2. By weight, mix 100 parts base silicone to 10 parts activator. Mix uniformly, scraping sides and bottom of mixing container. Do not whip air into mixture.
3. De-air by pulling vacuum on mixed material.
4. Pour and let cure overnight at room temperature or follow one of the schedules below:

25°C	24-48 Hours
65°C	2-4 Hours
100°C	1 Hour
150°C	20 Minutes

**SUBSTRATE NOTES:**

Certain materials may inhibit the cure of this product. Materials that should be avoided include sulfur containing materials, nitrogen containing materials (i.e. amines) some silicones (tin cured), and butyl and chlorinated rubbers. If in doubt, a patch test should be done.

**STORAGE:**

When stored in the original, unopened container, in a dry location at 65° - 80°F, 20-1634 has a shelf life of approximately six months.

**AVAILABILITY:**

20-1634 silicone is available in quart, gallon, five gallon pail, and 55 gallon drum kits.

**IMPORTANT:**

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