

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 PROPERTIES:

Viscosity, 25°C, cps	
Resin (Part A)	45,000
Activator (Part B)	100
Mixed	30,000
Mix Ratio (Resin:Activator)	
By Weight	100:10
Color	
Resin (Part A)	White
Activator (Part B)	Clear
Hardness, Shore A	34
Operating Temperature Range, °C	-65 to +235
Pot Life, 100 grams, 25°C	1 Hour
Specific Gravity, 25°C	
Resin (Part A)	0.80
Activator (Part B)	0.97
Mixed	0.82
Tensile Strength, psi	125
Tear Strength, psi	16.5
Elongation, %	225

Dielectric Constant, 100 Hz	3.1
Dielectric Strength, V/mil	450
Volume Resistivity, ohm-cm, 25°C	1×10^{14}

Thermal Conductivity, W/m-K	0.159
Coefficient of Thermal Expansion, per °C	2×10^{-4}

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:
 - a) 25°C 24-48 Hours
 - b) 65°C 2-4 Hours
 - c) 100°C 1 Hour
 - d) 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, HANDLING & SAFETY:

When stored in the original, unopened container, in a dry location at 25°C, 20-1634 has a shelf life of approximately six months.

Please read the Safety Data Sheet before using this or any other chemical.

AVAILABILITY:

20-1634 silicone is available in quart, gallon, 5-gallon pail, and 55-gallon drum kits.

IMPORTANT:

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06/2025