

Description

N-Sil 8735 is a one-part, fully cured, thermally conductive silicone gel. The cross-linked gel structure provides superior thermal conductivity and long-term thermal stability over conventional thermal grease materials. It is designed for applications requiring low compression forces and minimal thermal resistance.

Features

- High thermal conductivity and low thermal impedance
- Fully cured without pump out
- Easy to apply
- Easy to remove with alcohol or isopropanol
- High reliability and good resistance to thermal cycles
- Low modulus and mechanical stress

Typical Properties

Chemical Type	Silicone
Appearance	Pink Paste
Specific Gravity [g/cm ³]	~3.2
Shelf Life @ 10-28°C [months]	12
Volatility [%] 168 hrs @ 150°C	0.2
Typical Minimum Bond Line Thickness [mm]	0.10
Heat Capacity [J/g·K] ASTM E1269	1
Coefficient of Thermal Expansion [ppm/K] ASTM E831	150
Thermal Conductivity [W/m·K] ASTM D2214	3.5
Dielectric Strength [kV/mm] ASTM D149	9
Volume Resistivity [ohm-cm] ASTM D257	>1.0x10 ¹⁴

Directions for Use

1. Surface Treatment

Surfaces to be bonded should be free of dust, oil, grease or any other contaminants in order to achieve a reproducible bond. For slightly contaminated surfaces, it is sufficient to wipe with isopropanol or ethanol. Substrates with a low surface energy (e.g. polyethylene, polypropylene, Teflon) need to be pre-treated physically (e.g. atmospheric plasma or corona) in order to achieve sufficient adhesion.

2. Application

Our products are delivered ready for use. As soon as you receive them, you can dispense them, by hand from the container, or semi/fully automatically. When applied automatically, we recommend the use of air pressure with the appropriate cartridge/piston combination to dispense the conductive gel at the required speed and accuracy

3. Suggested working temperature range is -50 to 200°C.

Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature between **10°C to 28°C**.

TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

Materials Handling

This product is slight irritant to eye and skin. In case of eye contact, flush with water for fifteen minutes. Wash with plenty of soap and water after skin contact. If feel uncomfortable, discontinue use and consult a physician.

Refer to the Material Safety Data Sheet (MSDS) for this product.

Disclaimer

The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.