

OT-201

OMEGATHERM® Thermally Conductive Silicone Paste



M0066/1104



Introduction

OMEGATHERM® 201 is a thermally conductive, "Heat Sink" silicone grease. It has a very high thermal conductivity coupled with high insulation resistance and high dielectric strength. The term heat sink compound or thermal joint compound is used to describe this type of material. It does not harden on long exposure to elevated temperatures, but retains its past-like consistency. It is rated for continuous use between -40°F and +392°F (40°C and 200°C).

OMEGATHERM® is available in four quantity sizes, from a % oz. jar to a 2 lb. can, as outlined below.

OMEGATHERM® 201 Part Numbers and Sizes	
OT-201- ½ one ½ oz. jar	OT-201-2 one 2 oz. jar
OT-201-16 one 16 oz. can	OT-201-32 one 32 oz. can

OMEGATHERM 201 provides an excellent means of conducting heat and expanding the heat-path area from a surface to a temperature measurement sensor, thus increasing the speed of response and improving accuracy.

OMEGATHERM 201 improves the heat transfer between a solid state relay and its finned heat dissipating heat sink. Apply a thin layer of "201" thermal compound to the bottom of the solid state relay (SSR), then securely mount the SSR on the finned heat sink with the supplied screws.

Instructions for Use

Although OMEGATHERM 201 does not normally settle in its container, storage for long periods of time at elevated temperature may result in a slight separation of the conductive fillers from the silicone oil. If this condition is seen to exist, the fillers may be easily mixed by hand or mechanical mixing.

OMEGATHERM 201 may be dispensed through a nozzle using any appropriate hand operated or automatic equipment. For some applications, it will be convenient to apply thin films with a stiff brush.

To CLEAN OT-201 from surfaces, use a solvent containing Alcohol, MEK, or Xylene. Repeated use is required to completely clean silicon grease from surface.

Applications

- A. Surface Measurement Probes-dab a small amount on the surface and push the thermocouple into this area.
- B. Temporary Temperature Monitoring of Surfaces and Bodies-For applications to 392°F (200°C). OT-201 works

- well with insulated wire thermocouples. Simply dab this paste on the surface or into a cavity, put the sensor in the paste, and tape to hold.
- C. Thermocouple Wells (to 200°C)-improve the response time of your thermowell assemblies. Simply put enough OMEGATHERM 201 into the bottom of the wells to cover the active length of the sensor. This application holds for vertical wells or those canted down.
- D. NOT FOR USE IN A VACUUM. OT-201 will outgas if used in a vacuum.

Hygiene

MAY CAUSE IRRITATION.

- 1. Avoid contact with skin and eyes.
- 2. Wash thoroughly after handling.

First Aid

- 1. In case of contact, wash skin thoroughly with soap and water.
- 2. For eyes, flush with water for 15 minutes and consult physician immediately.

FOR INDUSTRIAL USE ONLY.

Typical Properties

Color: Off-white

Temperature Range of Use: -40° to +392°F (40° to +200°C)

Consistency: Thick, smooth paste

Volume Resistivity: 10¹⁴ ohm-cm

Dielectric Strength: 500 volts/mil (19.7 kv/mm)

Thermal Conductivity: 16 (BTU) (in)/(hr) (ft²) (°F)

0.0055 (cal)/(cm)/(sec) (cm²) (°C)

Specific Gravity: 2.53 g/cc

Weight Loss: 0.2% (24 hours/100°C

Shelf life: 1 Year (Storage at 35°F or below will approximately

double the shelf life).

Solvents: Alcohol or MEK or Xylene

Solvents

This information is not a warranty and assumes no legal responsibility. Actual suitability for a particular purpose is to be determined by the user.



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WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number under which the product was PURCHASED,
- 2. Model and serial number of the product under warranty, and
- 3. Repair instructions and/or specific problems relative to the product.
- FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
- 1. Purchase Order number to cover the COST of the repair,
- 2. Model and serial number of the product, and
- 3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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