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Ω OMEGA[®]

OB-200

Epoxy Adhesive

INSTRUCTION
SHEET

M0063/0611

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General Description

OMEGABOND[®] 200 is a black, high temperature, high thermal conductivity, two-part epoxy system which will bond temperature sensors to most materials, including metals, glass, ceramics and most plastics. It is recommended for bonding of "Cement-On" and beaded wire thermocouples for accuracy, and fast temperature measurement to 260°C (500°F). The epoxy system cures at elevated temperatures. Cure time varies from 8 hours at 250°F to 2 hours at 400°F. It has excellent strength and electrical insulating characteristics. Its thixotropic paste consistency virtually ensures freedom from sag during cure when applied to vertical surfaces.

OMEGABOND[®] 200 is mixed 100 parts resin to 10 parts catalyst by weight, and is supplied in 2-ounce "Twin Paks" to ensure proper formulating. A one-pound kit is also available.

Handling

CAUTION

- Avoid prolonged breathing of vapors-work in well-ventilated area
- Protect skin against contamination
- Protect eyes against contamination
- Do not take internally

Shelf Life: Six months at room temperature; one year in a dry environment, under refrigeration (35°F).

Physical Properties

Tensile Shear Strength, psi at 75°F (Kg/cm ²) (24°C)	2,700 (190)
Tensile Shear Strength, psi at 300°F, min (Kg/cm ² @ 149°C)	2,100 (148)
Flexural Strength, psi, min (Kg/cm ²)	14,000 (990)
Thermal Conductivity (BTU)(in)/[(hr)(ft ²)(°F)]	9.6
(cal)(cm)/[(sec)(cm ²)(°C)]	.003
Coefficient of Thermal Expansion, in/in/°F (in/in/°C)	21 x 10 ⁻⁶ (38 x 10 ⁻⁶)
Volume Resistivity, ohm-cm	10 ¹⁵
Color	Black
Maximum Continuous Temperature	500°F (260°C)

Directions for Use

OMEGABOND[®] 200 requires a special catalyst because of its high temperature rating. Catalyst OB-200 may be solid at room temperature. When warmed to about 150°F (65°C), it will become a liquid.

1. When supplied in can kits. OMEGABOND[®] 200 is mixed 100 parts of OB-200 Resin to 10 parts of OB-200 Catalyst by weight. Blend the two parts thoroughly to a uniform consistency. Pot-life is at least 24 hours at room temperature (75°F, 24°C).

When supplied in "Twin Paks," first warm the pouch to approximately 150°F in warm water or an oven. Then remove the divider, mix the two components in the pouch until they are uniform in texture and color. Then simply snip off a corner of the pouch and dispense.

2. Clean surfaces to be bonded. It is recommended wherever possible that the surfaces be abraded with emery cloth. A final cleaning with methyl ethyl ketone (MEK) or toluene is desirable.
3. Apply the blended OMEGABOND[®] 200 to both surfaces bring them together, squeezing out the excess. Keeping the epoxy layer as thin as possible will increase the response time. No pressure is needed. However, both surfaces should remain in contact.
4. Cure is at any one of the following schedules:
8 hours at 250°F (121°C)
6 hours at 300°F (149°C)
3 hours at 350°F (177°C)
2 hours at 400°F (204°C)

This information is not to be taken as warranty for which we assume legal responsibility nor as permission or recommendation to practice any patented invention without license. It is offered for consideration, investigation, and verification.

NOTES



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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.

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