

omega.com[®]

Ω OMEGA[®]

OB-200

Epoxy Adhesive

INSTRUCTION
SHEET

M0063/0611

Shop online at: omega.com e-mail: info@omega.com
For latest product manuals: omegamanual.info



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



OMEGAnet® Online Service omega.com	Internet e-mail info@omega.com
---------------------------------------	-----------------------------------

Servicing North America:

U.S.A.: Omega Engineering, Inc., One Omega Drive, P.O. Box 4047
ISO 9001 Certified Stamford, CT 06907-0047
Toll-Free: 1-800-826-6342 Tel: (203) 359-1660
FAX: (203) 359-7700 e-mail: info@omega.com

Canada: 976 Bergar
Laval (Quebec), H7L 5A1 Canada
Toll-Free: 1-800-826-6342 TEL: (514) 856-6928
FAX: (514) 856-6886 e-mail: info@omega.ca

For immediate technical or application assistance:

U.S.A. and Canada: Sales Service: 1-800-826-6342/1-800-TC-OMEGA®
Customer Service: 1-800-622-2378/1-800-622-BEST®
Engineering Service: 1-800-872-9436/1-800-USA-WHEN®

Mexico/ Latin America En Español: 001 (203) 359-7803 FAX: 000 (203) 359-7807
info@omega.com.mx e-mail: espanol@omega.com

Servicing Europe:

Benelux: Managed by the United Kingdom Office
Toll-Free: 0800 099 3344 TEL: +31 20 347 21 21
FAX: +31 20 643 46 43 e-mail: sales@omegaeng.nl

Czech Republic: Frystatska 184
733 01 Karviná, Czech Republic
Toll-Free: 0800-1-66342 TEL: +420-59-6311899
FAX: +420-59-6311114 e-mail: info@omegashop.cz

France: Managed by the United Kingdom Office
Toll-Free: 0800 466 342 TEL: +33 (0) 161 37 29 00
FAX: +33 (0) 130 57 54 27 e-mail: sales@omega.fr

Germany/Austria: Daimlerstrasse 26, D-75392 Deckenpfronn, Germany
Toll-Free: 0800 6397678 TEL: +49 (0) 7056 9398-0
FAX: +49 (0) 7056 9398-29 e-mail: info@omega.de

United Kingdom: OMEGA Engineering Ltd.
ISO 9001 Certified One Omega Drive, River Bend Technology Centre, Northbank
Irlam, Manchester M44 5BD United Kingdom
Toll-Free: 0800-488-488 TEL: +44 (0) 161 777-6611
FAX: +44 (0) 161 777-6622 e-mail: sales@omega.co.uk

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.
The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.
WARNING: These products are not designed for use in, and should not be used for, human applications.

**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.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

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. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2011 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.