

C-BOND™ 245

Flexible, room temperature curing epoxy adhesive

Description

C-BOND[™] 245 is a flexible general purpose epoxy adhesive which can be cured at room temperature. Adhesion to metals, plastics, glass and ceramics is excellent.

The flexibility of C-BOND[™] 245 may be adjusted by the amount of curing agent (Part B) which is used, as shown in the schedule below:

- Flexible 70 parts A to 100 parts B
- Semi-rigid 100 parts A to 100 parts B
- Rigid 100 parts A to 50 parts B

However, for most purposes, the semi-rigid formulation is preferred, and this is the ratio in which the two parts are standardly supplied.

C-BOND[™] 245 is ideal in applications where shock, shear and peel resistance is required.

Availability

C-BOND[™] 245 is available as a two-part kit comprising Part A and Part B, in the following sizes:

- 1 lb PINT (approx. 0.46 kg)
- 2 lb QUART (approx. 0.95 kg)
- 8 lb GALLON (approx. 3.60 kg)

The weights shown are the combined weights of Parts A and B.

Consult Cuming Microwave for bulk orders, or if special ratios of the two parts are required.

Unopened containers, if stored at room temperature, should have a shelf life of at least 6 months.

Typical properties

(for semi-rigid formula, as applicable)

Color:	Clear
Usage temperature:	-55 to +120 °C
	(-70 to +250 °F)
Hardness, shore A:	70
Lap shear strength:	20 MPa (3000 psi)
Dielectric strength:	15 kV/mm (400 V/mil)
Volume resistivity:	3 x 1013 Ohm-cm
Dielectric constant (10 ² to 10 ⁹ Hz):	5.0 to 3.5
Dissipation factor (10 ² to 10 ⁹ Hz):	0.03 to 0.04

Instructions for use

Clean the surfaces to be bonded prior to application of the adhesive. Alcohol or acetone work well to remove grease, dirt, and fingerprints.

Weigh out the desired amounts of Parts A and B into a suitable container. Mix thoroughly. Pot life is approximately two hours at room temperature.

Apply the adhesive using a brush, roller or squeegee. Mate the surfaces and apply pressure to squeeze out the excess. Ideally, the pieces being bonded should be held together under pressure during cure.

Cure will take place within 8 hours, but bond strength will continue to increase during the following 24 hours. A rapid cure can be made at: 65°C (150°F) for 40 minutes, or at 95°C (200°F) for 15 minutes.

It is advisable to post-cure a bond at a temperature equal to or above its intended usage temperature.

Handling of this product should present no health hazard if ordinary care is exercised to avoid breathing vapors, if skin and eyes are protected, and if material is not ingested. Consult the Material Safety Data Sheet for more information.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

This document has been reviewed by the PPG Aerospace Export Control Department and has been determined to contain only EAR99 controlled data.

Cuming Microwave Corporation

Engineered Materials 264 Bodwell Street Avon, MA 02322 Telephone +1 (508) 521-6700 Fax +1 (508) 584-2309 <u>www.cumingmicrowave.com</u> Made in the USA Issue Date: 10/24 Supersedes: New Lit: #4905