

Strain Gage Adhesives for Transducer Applications



OTHER ACCESSORIES USED IN AN M-BOND 610 INSTALLATION:

- CSM Degreaser or GC-6 Isopropyl Alcohol
- Silicon-Carbide Paper
- M-Prep Conditioner A
- M-Prep Neutralizer 5A
- GSP-1 Gauze Sponges
- CSP-1 Cotton Applicators
- MJG-2 Mylar® Tape
- TFE-1 Teflon® Film
- HSC Spring Clamp
- GT-14 Pressure Pads and Backup Plates



DESCRIPTION

Two-component, solvent-thinned, epoxy-phenolic adhesive for high-precision transducers; solids content 22%. Low viscosity, capable of gluelines <0.0002 in [0.005mm].

Extremely thin, hard, void-free gluelines minimize creep, hysteresis, and linearity problems. Life limited by oxidation and sublimation effects at elevated temperatures.

CHARACTERISTICS

Operating Temperature Range:

-452° to +450°F
[-269°C to +230°C]

Shelf Life:

9 months at +75°F [+24°C]; 15 months at +40°F [+5°C]

Pot Life:

6 weeks at +75°F [+24°C]; 12 weeks at +40°F [+5°C]

Clamping Pressure:

45 to 60 psi [3 to 4 bar]
50 psi [3.4 bar] optimum

Cure Requirements:

Recommended Cure: *1 hour at +350°F [+175°C]

Recommended Postcure: *2 hours at +400° to +450°F
[+205° to +230°C]

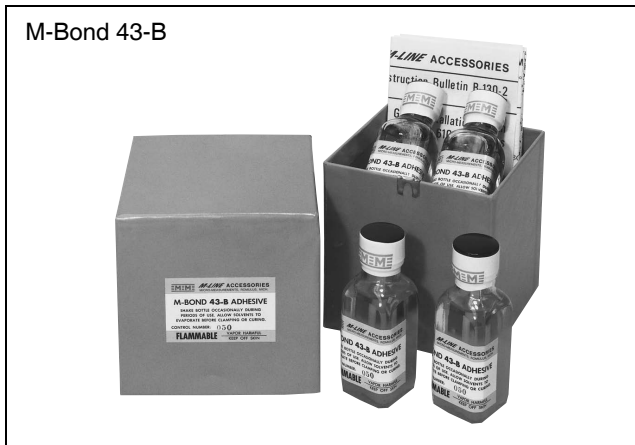
*Altered for aluminum-alloy transducers. See Strain Gage Installation Procedures for Transducers.

PACKAGING

Kit:

- 4 bottles [11g ea] Curing Agent
- 4 bottles [14g ea] Resin
- 4 brush caps for applying adhesive
- 4 disposable mixing funnels

Strain Gage Adhesives for Transducer Applications



OTHER ACCESSORIES USED IN AN M-BOND 43-B INSTALLATION:

- CSM Degreaser or GC-6 Isopropyl Alcohol
- Silicon-Carbide Paper
- M-Prep Conditioner A
- M-Prep Neutralizer 5A
- GSP-1 Gauze Sponges
- CSP-1 Cotton Applicators
- MJG-2 Mylar® Tape
- TFE-1 Teflon® Film
- HSC Spring Clamp
- GT-14 Pressure Pads and Backup Plates



RoHS
COMPLIANT

DESCRIPTION

Single-component, solvent-thinned, epoxy adhesive commonly used in transducer applications; solids content 25%. May be used both as an adhesive and as a protective coating. Capable of forming very thin, hard, void-free

gluelines similar to M-Bond 610. Highly resistant to moisture and chemical attack.

CHARACTERISTICS

Operating Temperature Range:

−452° to +250°F
[−269° to +120°C]

Shelf Life:

9 months at +75°F [+24°C]
18 months at +40°F [+5°C]

Pot Life:

9 months at +75°F [+24°C]
18 months at +40°F [+5°C]

Clamping Pressure:

45 to 60 psi [3 to 4 bar]
50 psi [3.4 bar] optimum

Cure Requirements:

Recommended Cure: 2 hours at +375°F [+190°C]

Recommended Postcure: 2 hours at +400°F [+205°C]

PACKAGING

Kit:

4 brush-cap bottles (30ml ea) premixed adhesive

Strain Gage Adhesives for Transducer Applications

M-Bond 450



OTHER ACCESSORIES USED IN AN M-BOND 450 INSTALLATION:

- " CSM Degreaser or GC-6 Isopropyl Alcohol
- Silicon-Carbide Paper
- M-Prep Conditioner A
- M-Prep Neutralizer 5A
- GSP-1 Gauze Sponges
- CSP-1 Cotton Applicators
- MJG-2 Mylar® Tape
- TFE-1 Teflon® Film
- HSC Spring Clamp
- GT-14 Pressure Pads and Backup Plates



DESCRIPTION

High-performance, two-component, solvent-thinned epoxy system specially formulated for high accuracy, elevated-temperature transducer applications.

CHARACTERISTICS

Operating Temperature Range:

Short Term: -452° to +750°F (-269° to +400°C)

Long Term: -452° to +500°F (-269° to +260°C)

Shelf Life:

6 months at +75°F (+24°C)

Pot Life:

6 weeks at +75°F (+24°C)

Clamping Pressure:

60 to 100 psi (4 to 6 bar)

Cure Requirements:

Step 1: Air dry at +75°F (+24°C) 10 to 30 min

B-Stage: +225°F (+105°C) for 30 min

Cure: +350°F (+ 175°C) for 1 hour

Recommended Postcure: 1 hour at 50°F (30°C) above max operating temperature

PACKAGING

Kit:

- 4 bottles (12.5g ea) Curing Agent
- 4 bottles (12.5g ea) Resin
- 4 brush caps for applying adhesive
- 4 disposable mixing funnels

References: M-M Instruction Bulletin B-130, Strain Gage Installations with M-Bond 43-B, 600, and 610 Adhesive Systems. M-M Instruction Bulletin B-152, Instructions for the Application of Micro-Measurements M-Bond 450 Adhesive. M-M Strain Gage Accessories databook.