

L-302

Modified Epoxy Film Adhesive



851 W. 18th Street
Costa Mesa, CA 92627
(949) 650-8106 Fax:(949) 631-6190

www.jdlincoln.com

Revised: 12/20/06

Product Data Sheet

Description

L-302 is a 250°F (121°C) curing modified epoxy film adhesive suitable for a wide variety of metal to metal or metal to core bonding applications. L-302 provides excellent peel strength over a wide range of processing cycles and is very suitable to rapid 'in-hot, out-hot' cure cycles.

Advantages of L-302

- ❖ Cure cycles as low as 235°F (113°C), varying heat-up rates, vacuum or positive pressure may be used without a significant reduction in bond joint strength.
- ❖ Low volatile content makes L-302 ideally suited for large area sandwich or metal to metal sections.
- ❖ L-302 exhibits excellent environmental resistance to salt spray, high-humidity, and standard test fluids.

Physical Properties

- *Standard Weight:* 0.060 lbs/ft² (292 g/m²)
- *Optional Weights:* 0.030 lbs/ft², 0.045 lbs/ft², 0.075 lbs/ft², 0.090 lbs/ft²
- *Standard Thickness:* 0.012" (0.30 mm)
- *Volatile Content:* Less than 0.5%
- *Tack:* Slightly Tacky

Availability

- 48" Wide Rolls x 100 Yards Long (122 cm x 91 m)

Shelf Life

- 6 months at 40°F (4°C)
- 7 days at Room Temperature (70°F or 21°C)

Cure Cycles

- 40 minutes at 275°F (135°C), or
- 60 minutes at 250°F (121°C), or
- 90 minutes at 235°F (113°C).

Applicable Documents

- MMM-A-132
- MIL-A-25463

Adhesive Primers

L-302 is compatible with:

- *L-309 Corrosion Inhibiting Primer*
- *L-312 Adhesive Primer*
- *L-319-1 Corrosion Inhibiting Adhesive Primer*

Average Mechanical Properties

PROPERTY	0.060 PSF (292 GSM) FILM		
	25 PSI (0.17 MPa) CURE	VACUUM BAG CURE	TEST METHOD
TENSILE SHEAR STRENGTH			
-67°F (-55°C)	5,500 PSI (37.9 MPa)	5,100 PSI (35.2 MPa)	MMM-A-132
ROOM TEMP	5,500 PSI (37.9 MPa)	5,200 PSI (35.8 MPa)	MMM-A-132
180°F (82°C)	3,600 PSI (24.8 MPa)	3,300 PSI (22.7 MPa)	MMM-A-132
SANDWICH PEEL STRENGTH			
-67°F (-55°C)	15 in lb/in (66.8 N/25 mm)	-	MIL-A-25463
ROOM TEMP	15 in lb/in (66.8 N/25 mm)	15 in lb/in (66.8 N/25 mm)	MIL-A-25463
180°F (82°C)	11 in lb/ in (49.0 N/25 mm)	-	MIL-A-25463
FLATWISE TENSILE STRENGTH			
-67°F (-55°C)	1,100 PSI (7.58 MPa)	-	MIL-A-25463
ROOM TEMP	1,300 PSI (8.96 MPa)	1,200 PSI (8.27 MPa)	MIL-A-25463
180°F (82°C)	1,000 PSI (6.89 MPa)	-	MIL-A-25463
FLEXURAL STRENGTH			
-67°F (-55°C)	2,600 PSI (17.9 MPa)	-	MIL-A-25463
ROOM TEMP	2,600 PSI (17.9 MPa)	2,400 PSI (16.5 MPa)	MIL-A-25463
180°F (82°C)	2,100 PSI (14.5 MPa)	-	MIL-A-25463

NOTICE:

Product data and parameters cited in this publication have been obtained in J.D. Lincoln, Inc. laboratories using the materials under carefully controlled conditions. The information, therefore, is believed to be accurate and correctly stated. Data of this type may be considered to be indicative of representative properties obtainable. J.D. Lincoln, Inc. cannot accept responsibility for the misapplication of these products, nor for their use under uncontrolled conditions. Numerical values resulting from the application of this material are dependant on processing details. It is recommended that the user develop his or her own application techniques and generate data consistent with his or her specific application and process.