# L-375

## Modified Epoxy Film Adhesive, Low-energy Cure

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

## *Product Data Sheet*

Revised: 3/19/09

## Description

L-375 is a low-temperature (150-250°F / 66-121°C) curing, high peel strength, flame retardant, modified epoxy film adhesive. L-375 is intended to be used for structural bonding of aluminum, fiberglass, aramid, and other structural materials to themselves and to various types of core materials such as aluminum, aramid/phenolic, PVC foam, balsa and paper for sandwich panel.

## Advantages of L-375

- The high peel strength and toughness of L-375 allow the designer to use this material in high abuse areas such as aircraft interiors, cargo systems, marine structural bulkheads, etc.
- L-375 is very easy to process through a wide variety of cure temperatures and pressures. Curing may occur in autoclave, press, or vacuum bag 8 hours at 150°F (66°C) or in just 30 minutes at 250°F (121°C) with contact pressure (use lower temperatures for balsa, urethane, or PVC core).
- With dry subcomponents, 'in-hot / out-hot' press cures may be developed by the user.

## Physical Properties

- *Standard Weight:* *0.060 lbs/ft$^2$ (292 g/m$^2$)*
- *Optional Weights:* *0.030 lbs/ft$^2$, 0.045 lbs/ft$^2$, 0.075 lbs/ft$^2$, 0.090 lbs/ft$^2$*
- *Support Carriers:* *Various supporting carriers, both woven and nonwoven are available*
- *Standard Thickness:* *0.012" (0.304 mm)*
- *Volatile Content:* *Less than 0.5%*
- *Tack:* *Medium to High Tack*

## Availability

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

## Shelf Life

- *6 months at 0°F (-18°C)*
- *30 days at 40°F (4°C)*
- *7 days at Room Temperature (75°F or 24°C)*

## Applicable Documents

- *MMM-A-132*
- *MIL-A-25463*
- *L-375 is self-extinguishing per FAR part 25.853*

## Cure Cycles

- *8 hours at 150°F (66°C), or*
- *6 hours at 175°F (79°C), or*
- *3 hours at 200°F (93°C), or*
- *30 minutes at 250°F (121°C).*

## Adhesive Primers

L-375 is compatible with:

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

## Average Mechanical Properties

| | 0.060 PSF FILM | | |
|---|---|---|---|
| **PROPERTY** | **25 PSI (0.172 MPa) CURE** | **VACUUM BAG CURE** | **TEST METHOD** |
| **TENSILE SHEAR STRENGTH** | | | |
| -67°F (-55°C) | 5,250 PSI (39.6 MPa) | 5,000 PSI (34.5 MPa) | MMM-A-132 |
| ROOM TEMP | 5,150 PSI (35.5 MPa) | 5,100 PSI (35.2 MPa) | MMM-A-132 |
| 180°F (82°C) | 3,100 PSI (21.4 MPa) | 2,800 PSI (19.3 MPa) | MMM-A-132 |
| **SANDWICH PEEL STRENGTH** | | | |
| -67°F (-55°C) | 8 in lb/in (36 Nm/m) | - | MIL-A-25463 |
| ROOM TEMP | 12.5 in lb/in (56 Nm/m) | 12.5 in lb/in (56 Nm/m) | MIL-A-25463 |
| 180°F (82°C) | 8.5 in lb/in (38 Nm/m) | - | MIL-A-25463 |
| **FLATWISE TENSILE STRENGTH** | | | |
| -67°F (-55°C) | 1,200 PSI (8.3 MPa) | - | MIL-A-25463 |
| ROOM TEMP | 1,150 PSI (7.9 MPa) | 1,075 PSI (7.4 MPa) | MIL-A-25463 |
| 180°F (82°C) | 850 PSI (5.9 MPa) | - | MIL-A-25463 |
| **FLEXURAL STRENGTH** | | | |
| -67°F (-55°C) | 2,000 PSI (13.8 MPa) | - | MIL-A-25463 |
| ROOM TEMP | 2,400 PSI (16.5 MPa) | 2,200 PSI (15.2 MPa) | MIL-A-25463 |
| 180°F (82°C) | 1,900 PSI (13.1 MPa) | - | MIL-A-25463 |