

## Aircraft Interior Room Temperature Curing FST Adhesives

L&L Products epoxy-based, interior adhesives have been developed to bond various substrates (metal, thermoplastics and composites) that are common to the aerospace industry. These two component toughened adhesives cure at room temperature and provide high performance bonding. Designed for interior applications, they meet the latest FAA fire regulations (vertical burn, smoke density, and toxicity).

The adhesives are available in different open time versions that allow for a work life from 5 minutes to one hour, to fit the required application processes.

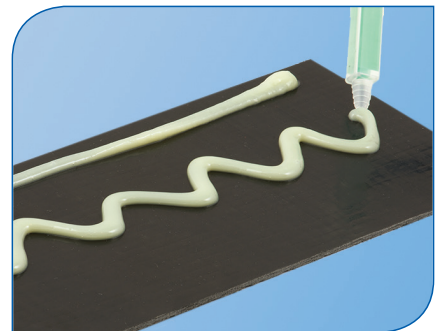
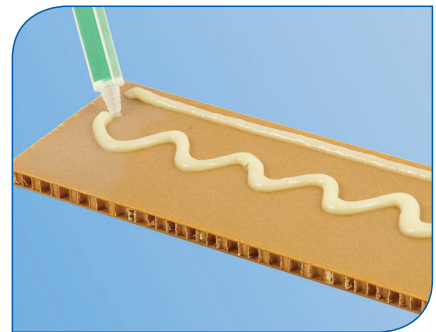
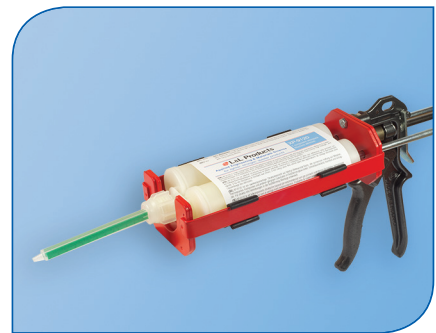
They can be supplied in twin-barrel cartridges, pails, or drums.

### Key Product Attributes

- FST regulation compliant - FAR 25.853, ABD0031
- High strength bonding
- Can be used in a wide range of temperatures

### Typical Application Areas

- Panel assembly
- Insert bonding
- Bracket bonding
- Honeycomb cut & fold fabrication



## Technical Data

The following information and data should be considered typical and should not be used for specification.

TYPICAL PROPERTIES				
		XP-9105	L-9115	L-9150
Physical Properties	Color	Off-white, viscous liquid	Off-white, viscous liquid	Off-white, viscous liquid
	Working Time	4-8 min (10 gram sample)	10-20 minutes (10 gram sample)	35-50 min (10 grams sample)
	Cured Density	1.12 g/cc	1.30 g/cc	1.24 g/cc
	Mix Ratio	1:1	1:1	1:1
Mechanical Properties	Tensile Strength on etched 2024 T3 Bare Al cured 24 hours at 23°C	-	> 15MPa (2175 psi)*	> 16 MPa (2300 psi)
	Tensile Strength on BR-127 Primed Al cured 24 hours at 23°C	> 15 MPa (2175 psi)	> 16MPa (2300 psi)*	> 16 MPa (2300 psi)
Fire Properties	FAA Vertical Burn 12 s FAR 25.853 App. F Part I (a) (ii)	PASS	PASS	PASS
	FAA Vertical Burn 60 s FAR 25.853 App. F Part I (a) (i)	-	PASS	PASS
	FAA Smoke Density FAR 25.853 (d) Appendix F, Part V	-	PASS	PASS
	Toxicity (Flaming) ABD0031, AITM 3-005, Issue 2	-	PASS	PASS

\*27°C (81°F)

Material starting with letter "L" are commercialized materials. Materials starting with letters "XP" are experimental: the properties for the XP materials are targets.

## Bonding Process

- Parts should be mated and held in final position before the expiration of the working time.
- Note that working and fixture times can be accelerated with elevated temperature, whereas lower temperatures slow reaction speed down and lengthen these times. The application temperature for the adhesive and parts should be between 15°C and 30°C (60 and 85°F).

## Shelf Life & Storage Conditions

- Store below 0°C. 1-year shelf life if stored between 0°C and 30°C in original packaging. Long term exposure to elevated temperature can cause the material to lose performance characteristics. Keep away from direct sunlight and all sources of heat and ignition.

## Surface Preparation

- The substrates must be clean, dry, and free of dust. Clean surfaces using a general purpose industrial organic solvent. It may be necessary to use an additional surface preparation product (e.g. surface sanding, acid etching for aluminum or primer for thermoplastics) for optimal adhesive behavior.

## Health & Safety

- Consult product specific Safety Data Sheet.
- All of our products are developed with REACH compliance.

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