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EPOXY FILM
LESP8680-WL

**Tack Free
 Electrically Conductive
 Epoxy Film Adhesive**

IDEAL FOR:

- Die Attach
- High Volume, Automated Assemblies
- Lid Sealing

DESCRIPTION:

LESP8680-WL is a liquid version of ESP8680. It is a silver-filled high bond strength epoxy film adhesive. It is designed for bonding die, component, and substrate. LESP8680-WL has excellent thermal conductivity. The dry, tack-free handling of the film makes it suitable for an automated assembly.

Because of its high bond strength, LESP8680-WL is recommended only for matched substrates. For die attach, it is recommended only for those less than 1cm x 1cm in size. LESP8680-WL is recommended for all other applications.

AVAILABILITY:

LESP8680-WL is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available.

APPLICATION PROCEDURE

- (1) Remove film from protective paper.
- (2) Cut to desired size.
- (3) Place on substrate and cure according to one of the recommended schedules.

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 60 minutes)	<4x10 ⁻⁴ ohm-cm
Dielectric Strength (Volts/mil)	Not Applicable
Glass Transition Temp.(°C)	130
Current Carrying Capabilities	Not Available
Lap-Shear Strength	>1100 psi >7.6 N/mm ²
Device Push-off Strength	>6600 psi >46 N/mm ²
Hardness (Type)	88 (A)
Cured Density (gm/cc)	3.8
Thermal Conductivity	45 Btu-in/hr-ft ² -°F 6.4 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	45
Maximum Continuous Operation Temp. (°C)	150

* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

CURE SCHEDULES:

Temperature	Time	Pressure
80°C	8 hr	3-5 psi
100°C	4 hr	3-5 psi
125°C	2 hr	3-5 psi
150°C	1 hr	3-5 psi
200°C	20 min	3-5 psi

The die or component can also be tacked on the substrate at 80°C or higher with 5 psi. When a fillet around the edge of the die or component is observed, the pressure can be released for the rest of the bonding cycle.

SHELF LIFE:

Storage temperature	Shelf Life
0-5°C	1yr in sealed package

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