DESCRIPTION
Sheet adhesive in the DuPont™ Pyralux® product line is a proprietary B-staged modified acrylic adhesive coated on release paper. Sheet adhesive is used primarily to bond flexible innerlayers or rigid cap layers in multilayer lamination. It is also widely used to bond flexible circuits to rigid boards during the fabrication of rigid-flex circuits, as well as to bond stiffeners and heat sinks.

CONSTRUCTION
Sheet adhesive is available in a variety of thicknesses; see Table 1. The product code must be used when ordering sheet adhesive from DuPont.

Table 1 - Sheet Adhesive Product Codes

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Adhesive Mil (µm)</th>
<th>IPC Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF0100</td>
<td>1 (25)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF0200</td>
<td>2 (51)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF0300</td>
<td>3 (76)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF0400</td>
<td>4 (102)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF1500</td>
<td>1/2 (13)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF1700</td>
<td>.7 (18)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF1800</td>
<td>.8 (20)</td>
<td>Yes</td>
</tr>
<tr>
<td>LF7049</td>
<td>1.5 (38)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

A Certificate of Analysis is available with every batch. Complete material and manufacturing records for each lot, with samples of finished laminate, are retained for reference purpose. The roll labels contain the lot number, DuPont order number, customer order number, IPC specification, customer specification, and customer part number; save these labels for reference in case of inquiries.

PROCESSING
Laminating conditions for Pyralux® flexible composites are typically in the following ranges:

Part Temperature: 182–199°C (360–390°F)
Pressure: 14–28 kg/cm² (200–400 psi)
Time: 1–2 hours, at temperature

For further processing information contact your DuPont representative to receive a Pyralux® Technical Manual.
DUPONT™ PYRALUX® LF SHEET ADHESIVE

STORAGE CONDITIONS AND WARRANTY
DuPont™ Pyralux® LF Sheet Adhesives should be stored in the original packaging at temperatures of 4–29°C (40–85°F) and below 70% humidity. The product should not be frozen and should be kept dry, clean and well protected. Subject to compliance with the foregoing handling and storage recommendations, the DuPont warranty, as provided in the DuPont Standard Conditions of Sale, shall remain in effect for a period of two years following the date of shipment.

SAFE HANDLING
Pyralux® sheet adhesive contains a B-staged adhesive. Because B-staged adhesive contains trace quantities (parts per million) of unreacted monomers, precautions and recommendations should be taken to minimize contact.

DuPont is not aware of anyone developing contact dermatitis, or suffering any other medical discomforts, when using Pyralux® products. The uncured acrylic monomers in the bond ply adhesive may impart a mild odor. However, these products have been extensively tested under operating conditions (drilling and lamination conditions) and found to liberate measurable volatiles only well below 1 accepted safe limits (e.g., PEL).

To eliminate contact between the skin and the adhesive, wear lint-free gloves or fingerpads. Anyone handling Pyralux® should wash their hands with soap before eating, smoking, or using restroom facilities. Gloves and fingerpads should be changed daily, and wash other protective clothing frequently.

Adequate ventilation and exhaust is recommended in press rooms to prevent the buildup of potentially harmful vapors, to remove disagreeable odors, and to dissipate heat. Drill rooms should be furnished with standard equipment recommended by drill vendors and required by OSHA standards.

For further information on safe handling, refer to DuPont publication H-46862, “Pyralux® LF and FR Safe Handling;” and refer to “Industrial Ventilation,” 18th Edition or latest available from the American Conference of Governmental Industrial Hygienists, 6500 Glenway, Building D-5, Cincinnati, OH 45211.

Values for all materials monitored were well below 10% of their accepted limits (PEL or TLV). In only one case, did the concentration reach approximately 40% of its limit. This was an oven used to dry the uncured acrylic material. This oven drying is not normally used in the process and during the exposure the oven was unventilated. Adequate ventilation is normally recommended for any heating process.

FOR MORE INFORMATION ON DUPONT™ PYRALUX® FLEXIBLE CIRCUIT MATERIALS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE, OR VISIT OUR WEBSITE:

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Fax: 91-22-67101937

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see “DuPont Medical Caution Statement,” H-50102-4.