



DuPont™ Pyralux® HP

High Performance Epoxy Coverlay

Flexible Circuit Materials

Product Description

DuPont™ Pyralux® HP Coverlay features DuPont™ Kapton® polyimide film and a low loss, high reliability epoxy-based adhesive, specifically designed for OEMs and PCB design manufacturers. Its optimized low-loss solution is for multi-layer flex and rigid-flex PCB's in military, automotive and medical applications. Pyralux® HP coverlay provides best-in-class insertion loss performance, increased functionality and ease of processing while maintaining high reliability.

Key Features and Benefits

- Excellent electrical performance (low Dk/Df)
- Robust processability
- Demonstrated high reliability
- Designed for extreme PCB applications
- Manufactured in the USA
- Certified to IPC-4203/2
- RoHS compliant

Packaging

DuPont™ Pyralux® HP Coverlay is supplied on 24 in (610 mm) wide rolls in either 100 ft (30.5 m) or 250 ft (76 m) lengths, on nominal 3 in (76 mm) cores.

Storage and Warranty

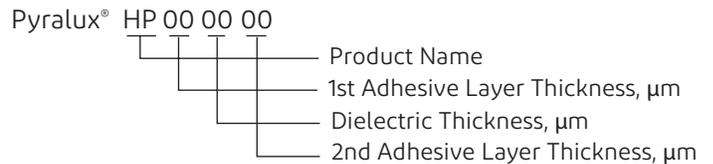
Pyralux® HP High Performance coverlay requires refrigeration and should be stored below 5 °C (41 °F) and at 50 ± 20% humidity. The product should not be frozen and should be kept dry, clean, and well-protected. If there has been a deviation from the recommended storage conditions, an examination and small scale evaluation should be performed prior to committing to large scale production.

Subject to compliance with the foregoing handling and storage recommendations, DuPont's warranties shall remain in effect for the period provided in the DuPont Standard Conditions of Sale.

Table 1 - Standard Pyralux® HP Offerings

Product Code	Adhesive Thickness µm (mil)	Kapton® Thickness µm (mil)
HP121200	12 (0.5)	12 (0.5)
HP252500	25 (1)	25 (1)
HP502500	50 (2)	25 (1)
HP255000	25 (1)	50 (2)
HP505000	50 (2)	50 (2)

Product Code Key



Processing

Lamination conditions for DuPont™ Pyralux® HP high performance epoxy coverlay are typically in the following ranges:

Part Temperature: 175 - 190 °C (347 - 374 °F)

Pressure: 28 - 40 kg/cm² (400 - 565 psi)

Time:..... 60 - 120 minutes, at temperature

Additional Pyralux® HP adhesive processing information is available from your DuPont sales representative.

Pyralux® HP Construction Selection

A variety of Pyralux® HP high performance laminate system constructions are commercially available. For help beyond the standard offerings in Table 1, please use contact your DuPont sales representative or use the Laminate Product Selector at pyralux.dupont.com to identify the appropriate product code for your laminate solution.



Safe Handling

Prior to handling, DuPont recommends referencing the Pyralux® Safe Handling Guide available at pyralux.dupont.com.

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Quality and Traceability

DuPont™ Pyralux® HP High Performance Coverlay is manufactured under a certified ISO9001:2015 Quality Management System facility. Complete material and manufacturing records, which include archive samples of

finished product, are maintained by DuPont. Each manufactured lot is identified for reference traceability. The packaging label serves as the primary tracking mechanism in the event of customer inquiry and includes the product name, batch number, size, and quantity.

Product Performance

Table 2 - DuPont™ Pyralux® HP high performance epoxy coverlay properties

Property	HP252500 Typical Values	Test Method
Dielectric Constant (Dk) @ 10 Ghz	3.0	ASTM D2520
Loss Tangent (Df) @ 10 GHz	0.0045	ASTM D2520
Peel Strength (Adhesion to Copper) As Received, N/mm (lb/in) After Solder, N/mm (lb/in)	1.76 (10.0) 1.76 (10.0)	IPC-TM-650 2.4.9
Adhesive Flow, mils/mil	3.0	IPC-TM-650 2.3.17.1
Solder Float, 288 °C for 10 s	Pass	IPC-TM-650 2.4.13
Glass Transition Temperature (Tg), °C	102	IPC-TM-650 2.4.24

Data within this table are typical values for the listed product. Performance can vary depending on construction and processing.



pyralux.dupont.com

For more information on Pyralux® HP Coverlay or other DuPont products, please visit our website.

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. It may be subject to revision as new knowledge and experience becomes available. This information is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. Since we cannot anticipate all variations in end-use and disposal conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-5 and "DuPont Policy Regarding Medical Applications" H-50103-5.

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