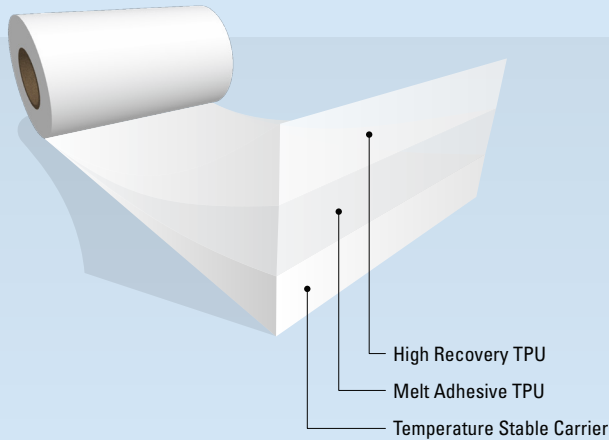




# DUPONT™ INTEXAR™ TE-11C

BASE FILM FOR WEARABLES APPLICATIONS

## Base Film TE-11C



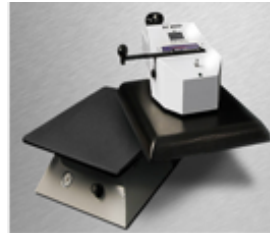
## PRODUCT DESCRIPTION

DuPont™ Intexar™ TE-11C is a stretchable bilayer thermoplastic polyurethane (TPU) film. TE-11C is comprised of high recovery and melt adhesive layers optimized for high stretch smart clothing applications like fitness and health monitoring when wearer comfort is paramount. The high recovery layer is specially designed for compatibility with Intexar™ stretchable electronic ink printing. The melt adhesive layer is designed for bonding to fabrics under heat press lamination. The film is supplied on a temperature stable polypropylene carrier for high throughput sheet-fed or roll-to-roll screen printing.

## PRODUCT BENEFITS

- High recovery, light weight, stretchable TPU
- Designed for compatibility with Intexar™ stretchable electronic inks
- Bonds strongly to most fabrics and compatible with Cover Film TE-21C
- Soft to the touch, designed for comfort

## Example of Clamshell Style Press



Example from <http://geoknight.com/>

## Lay-up in Laminator

Heating Plate
Parchment Paper
Base Film
Fabric
Parchment Paper
Laminator Base

## PROCESSING GUIDELINES

- Trim to required size for print
- After printing is completed on TE-11C, remove the carrier layer
- Bond TE-11C to fabric by laminating in a clamshell style press with uniform platen temperature & pressure:
  - Use parchment paper to avoid air entrapment during lamination
  - Temperature set-point 125 – 135°C (expect 5 – 10°C offset between set-point and maximum temperature achieved during bonding process)
  - Dwell time 15 – 30 seconds
  - Pressure 414 - 483 kPa gauge pressure (60 – 70 psig)
- Fabric lamination requirements vary and not all fabrics are compatible

## ROLL LENGTHS & WIDTHS

Roll Width (mm)	Roll Length (m)	
406	100	500
610	100	500
813	100	500
1473	100	500

Roll Width (in)	Roll Length (yd)	
16	109	547
24	109	547
32	109	547
58	109	547

Other dimensions may be available upon request, please contact local sales agent.



# DUPONT™ INTEXAR™ TE-11C BASE FILM FOR WEARABLES APPLICATIONS

## BASE FILM TYPICAL PROPERTIES: TE-11C

Typical Properties	Value
Color	Translucent clear
High Recovery Layer Thickness	50 – 75 µm
Melt Adhesive Layer Thickness	25 – 50 µm
Recovery <sup>1</sup>	97%
Modulus <sup>2</sup>	(40%) 4.3N (100%) 6.2N
Shore A Hardness	71
Melt Adhesive glue line temperature	130°C
Roll Length <sup>3</sup>	100 – 500 m
Roll Width <sup>3</sup>	406 – 1473 mm

<sup>1</sup>Recovered strain after 40% strain at 508mm/min, 1 second rest

<sup>2</sup>Force required to pull 2cm wide 100µm thick film to specified strain after first cycle

<sup>3</sup>Refer to Roll Lengths & Widths Tables above for details

## STORAGE AND SHELF LIFE

Rolls should be stored in a clean stable environment at room temperature (<25°C).

## SAFETY AND HANDLING

For Safety and Handling information, please refer to the Article Information Sheet.

## FOR MORE INFORMATION ON DUPONT™ INTEXAR™ TE-11C OR OTHER DUPONT PRODUCTS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

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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-50102-5.

K-29776 (11/17)