



**TECHNICAL DATA SHEET** 

# Flexel<sup>™</sup> TPF4050

## **Thermoplastic Film Adhesive**

#### **Material Description**

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Flexel<sup>™</sup> TPF4050 is heat-activated adhesive film for bonding ABS, PC, nylon, pre-treated olefins, and textiles including artificial and genuine leather. TPF4050 is a free film supplied on siliconized paper.

#### Features & Benefits

- Easy to use film form
- Excellent adhesion to plastics & textiles

#### **Surface Prep**

Surfaces must be clean and free from dust, fatty substances and release agents. For optimum Adhesion, the surface tension of the substrates to be bonded should be more than 38 dynes/cm.

Recommended surface preparation for optimal adhesion is as follows:

PC, ABS, Glass:	IPA wipe
Nylon:	Plasma treatment

#### **Application Instructions**

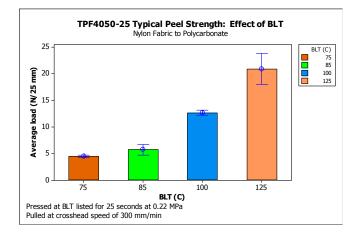
1. Place adhesive film between substrates.

2. Optional: Prelamination at bondline temperature (BLT) of 60°C for 10 to 30 seconds and pressure of 0.20 to 0.50 MPa.

3. Final bonding: Bondline temperature (BLT) of 90 to 130 °C for 25 to 90 seconds at pressure of 0.20 to 0.50 MPa

3. The glued materials can be further processed immediately after bonding and cooling down (handling, trimming, cutting, etc.).

Property	Typical Value
Base	Thermoplastic Polyurethane
Color	Slightly Opaque
Specific Gravity	1.16
Solid Content %	100%
Melt Flow Rate (DIN 53920)	4 to 13 dg/min
Standard Film Thickness	25 & 50 µm



#### Storage & Shelf Life

TPF4050 should be stored in a cool, dry place.

Shelf life is 12 months from date of manufacture when stored between 0 and 40°C.

#### **Health & Safety Precautions**

Please see the Material Safety Data Sheet (MSDS) for proper handling and disposal instructions.

### Connecting what matters.™

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