

CNCGLASS Vacuum Bag Film

Polyimide 425 °C for High-Temperature Vacuum Bagging

Technical Product Catalog · English

Brand: CNCGLASS

Company: CNC Ucolin Interlayer Technology Co., Ltd.

Address: SHENZHEN, GD, CHINA

Peter Lin | cnc@cncglass.com | WhatsApp/Mobile +86 15013829504 | WeChat wecan365 | www.cncglass.com

High-temperature polyimide (PI) vacuum bag film · max use temperature 425 °C · high tensile · good barrier under high temperature / pressure · suitable for multiple resin vacuum-bag processes. Color: dark brown. Form: sheet.



Figure 1. CNCGLASS polyimide vacuum bag film (dark-brown roll) — product photo from linked page, watermarked.

1. Product Overview

This **CNCGLASS** vacuum bag film is a high-temperature polyimide (PI) membrane with high tensile strength. Maximum use temperature **425 °C** (prose and specification table on the source page both state 425 °C — used as the single governing figure). Good barrier performance under high temperature and pressure; suitable for multiple resin vacuum-bag processes.

Industry practice (public vacuum-bagging literature): polyimide bag film, high-temp sealant tape, and breather form a sealed stack; vacuum consolidates and extracts air before / during heat cure at elevated temperature.

2. Technical Specifications

Product facts — no model / SKU. Custom size and thickness available. ASTM values kept as source-page facts. Material name polyimide / PI is retained as material description only.

Dimensions & form

Thickness	Size	Form
50 µm	1.52 m × 78 m	Sheet

Material & mechanical properties

Property	Value	Test method
Material	Polyimide (PI)	—
Elongation at break	95%	ASTM D882
Tensile strength	240 MPa	ASTM D882
Max use temperature	425 °C	—
Color	Dark brown	—

Custom size / thickness: available to customer requirements.

3. Vacuum Bag Principle

The polyimide bag film forms an airtight envelope over the laminate or composite layup. Sealant tape closes the perimeter. A breather layer provides air paths to the vacuum port. Under vacuum — and in autoclave with added external pressure — the stack consolidates and air / volatiles are extracted before or during heat cure up to 425 °C.

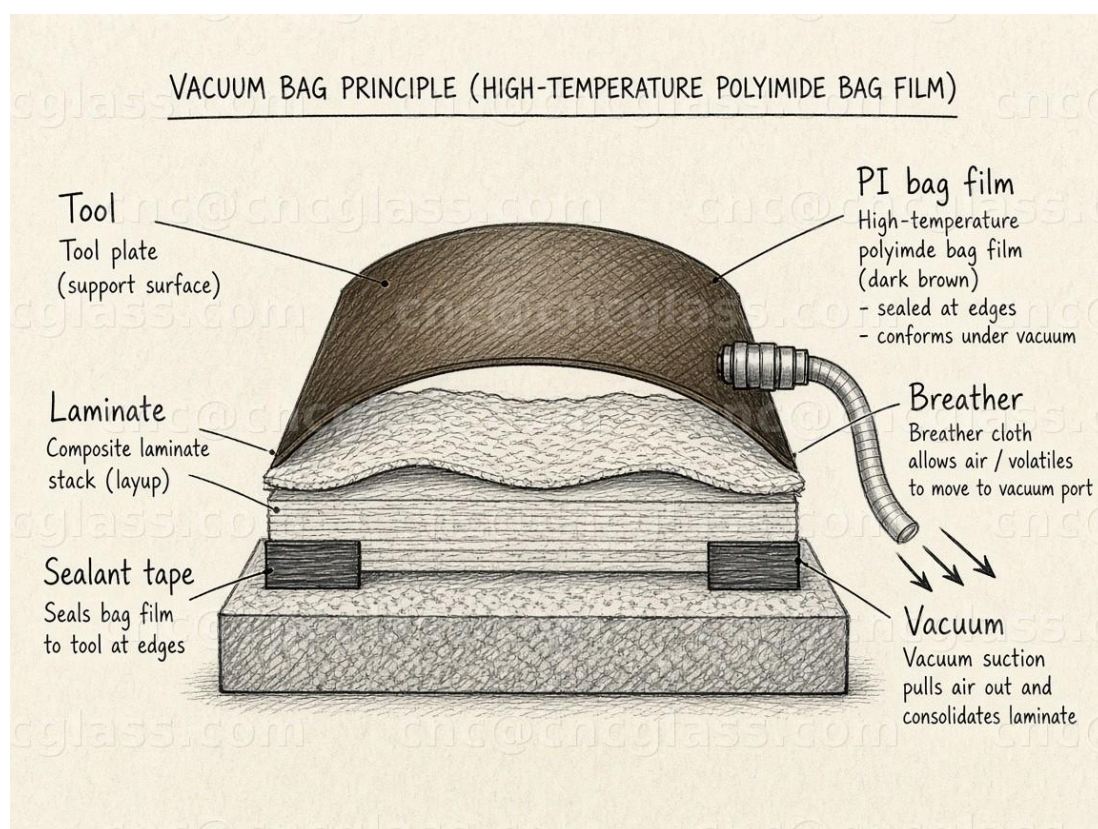


Figure 2. Vacuum bag principle (hand-drawn sketch): PI film over laminate + breather + sealant tape; vacuum drawn through port.

For laminated glass: vacuum bagging / vacuum-oven bagging can de-air interlayer stacks when process temperature and bag materials fit the line; high-temp PI film is typically selected for resin / composite cures near the 425 °C rating rather than ordinary EVA glass laminating.

4. Polyimide Film Structure (Schematic)

Product material fact: polyimide / PI (dark brown). Figure 3 is a hand-drawn sketch cutaway only. Exact film chemistry beyond “polyimide” is not published on the source page and is not claimed here.

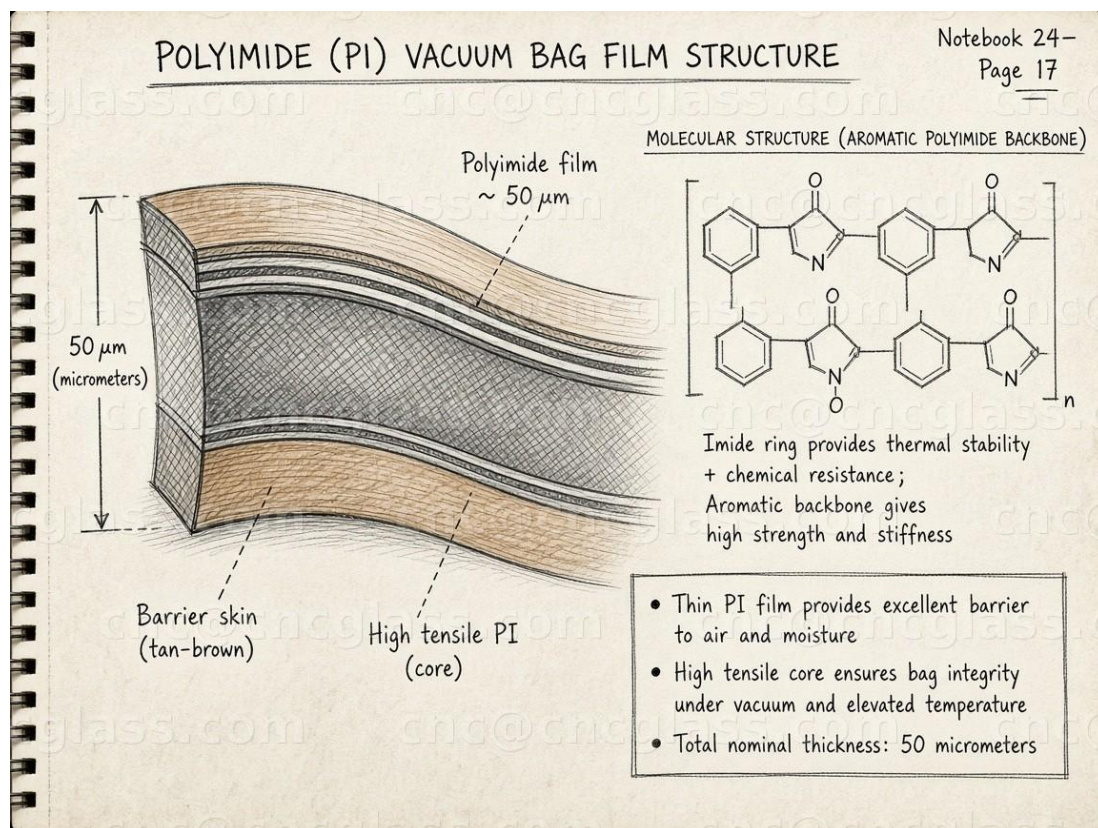


Figure 3. Polyimide (PI) vacuum bag film structure (hand-drawn sketch) — educational only.

5. High-Temperature Process

Typical flow: (1) lay laminate / composite on tool; (2) release / peel ply and breather as required; (3) cover with polyimide vacuum bag film; (4) seal perimeter with high-temp sealant tape; (5) pull vacuum; (6) cure in oven and/or autoclave while holding vacuum. Keep process peaks within the 425 °C maximum use temperature with margin for local hot spots. Confirm sealant, breather, and port hardware are rated for the same temperature class.

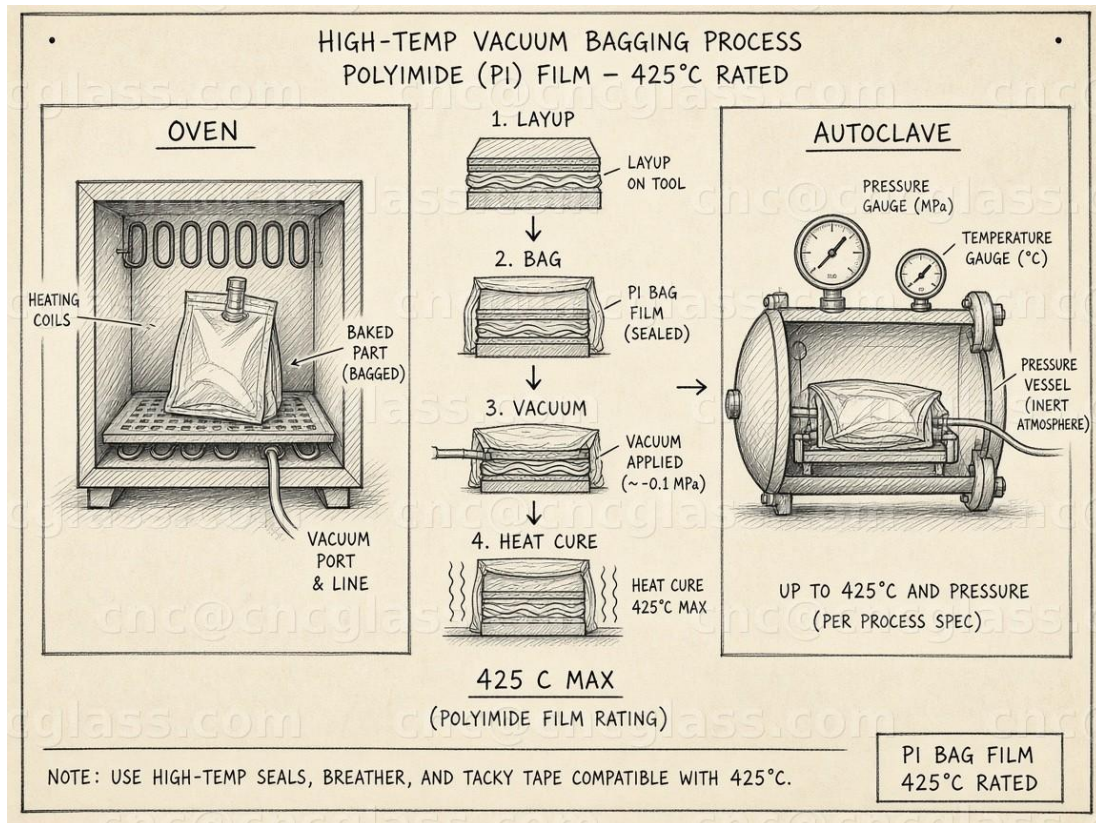


Figure 4. Process (hand-drawn sketch): high-temperature oven / autoclave vacuum bagging with 425 °C-class polyimide film.

6. Applications

CNCGLASS polyimide 425 °C vacuum bag film is positioned for:

- High-temperature vacuum-bag processes for resins within the 425 °C rating.
- Autoclave / oven bagging needing high tensile and high T/P barrier performance.
- Composite vacuum-bag processes with dark-brown PI sheet film (1.52 m × 78 m).
- Special laminated / interlayer de-air bagging where polyimide bag film fits the temperature profile.



Figure 5. Applications (hand-drawn sketch): high-temp composite bagging, resin cure, laminated-glass de-air, and dark-brown PI sheet roll.

7. Packaging, Storage & Handling

- Store in a dry place, away from light / direct sun.
- Storage surface should be smooth; clear sharp objects to avoid punctures.
- Handle gently when moving and deploying sheet rolls.
- During use, protect the film surface — do not contact sharp items that could pierce the membrane.

Form: sheet. Color: dark brown. Nominal size: 1.52 m × 78 m at 50 µm.

8. Notes for Glaziers & Laminators

- Match 50 µm sheet to part size and edge sharpness; request custom thickness if needed.
- Leak-check bags before heat; pinholes defeat vacuum.
- Pair with high-temperature sealant tape and breather compatible with 425 °C peaks.
- For autoclave / oven cycles, confirm 425 °C peak and external pressure compatibility with CNCGLASS.

Shop tip (public bagging guides): intentional pleats at corners; bridging wrinkles can tear under vacuum or autoclave pressure — more critical at very high cure temperatures.

Contact

Brand: CNCGLASS

Company: CNC Ucolin Interlayer Technology Co., Ltd.

Address: SHENZHEN, GD, CHINA

Peter Lin | cnc@cncGlass.com | WhatsApp/Mobile +86 15013829504 | WeChat wecan365 | www.cncglass.com

Contact: Peter Lin

Email: cnc@cncGlass.com · WhatsApp / Mobile: +86 15013829504 · WeChat: wecan365

Website: www.cncglass.com

Ask **CNCGLASS** for sheet size, thickness (50 µm standard; custom available), and 425 °C process confirmation for your high-temperature vacuum bagging / oven / autoclave line.