

Product Description

FEP (Fluorinated Ethylene Propylene) film is a premium elastic separation film engineered specifically for bottom-up MSLA 3D printers. Produced from high-quality FEP fluoropolymer, this transparent film provides dependable non-stick release, chemical resistance and UV transmission. It is a proven, economical choice for routine resin-printing applications and a wide range of printer sizes. FEP stands out with reliable release, excellent optical clarity and broad compatibility, enhancing printing success rates, helping reduce release-related failures across a broad range of model geometries.

Ideal for MSLA, LCD and DLP printers where value, clarity and dependable performance are essential, FEP excels in producing high-quality, detailed models across a variety of industries, including **engineering, dental, and manufacturing**. Whether you are creating intricate designs or large-scale prototypes, FEP provides the reliability and quality assurance needed to achieve superior printing results.

Product Features

Reliable Release Performance | FEP film provides a smooth, non-stick surface that supports predictable separation from cured resin. When correctly tensioned and paired with suitable lift settings, it delivers dependable performance across everyday MSLA, LCD and DLP printing.

Excellent Optical Clarity | High light transmission and a low refractive index support efficient UV exposure through the vat. This optical performance helps maintain accurate curing, fine detail and consistent layer formation.

Chemical Resistance | FEP is chemically inert and resistant to common resin chemistries. Its low moisture absorption and non-stick surface make it practical for routine vat use, inspection and maintenance.

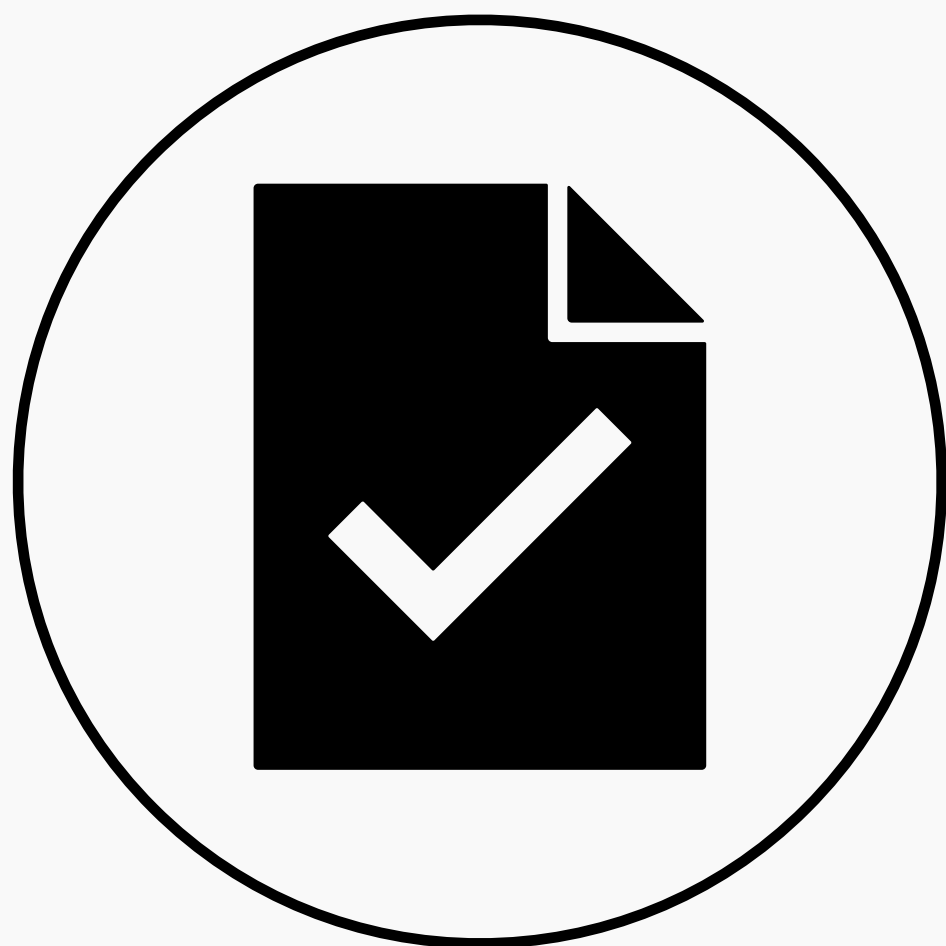
Superior Print Quality | Due to its exceptional peeling performance, the FEP film minimises deformation during the peeling process, allowing for the production of detailed, high-quality prints with excellent dimensional accuracy. This feature is crucial for professionals who demand the highest quality in their finished products, making it ideal for intricate designs and complex geometries.

Broad Printer Compatibility | FEP film is the established standard for a wide range of MSLA, LCD and DLP resin vats. It offers a practical balance of clarity, release performance, availability and replacement cost for everyday printing.

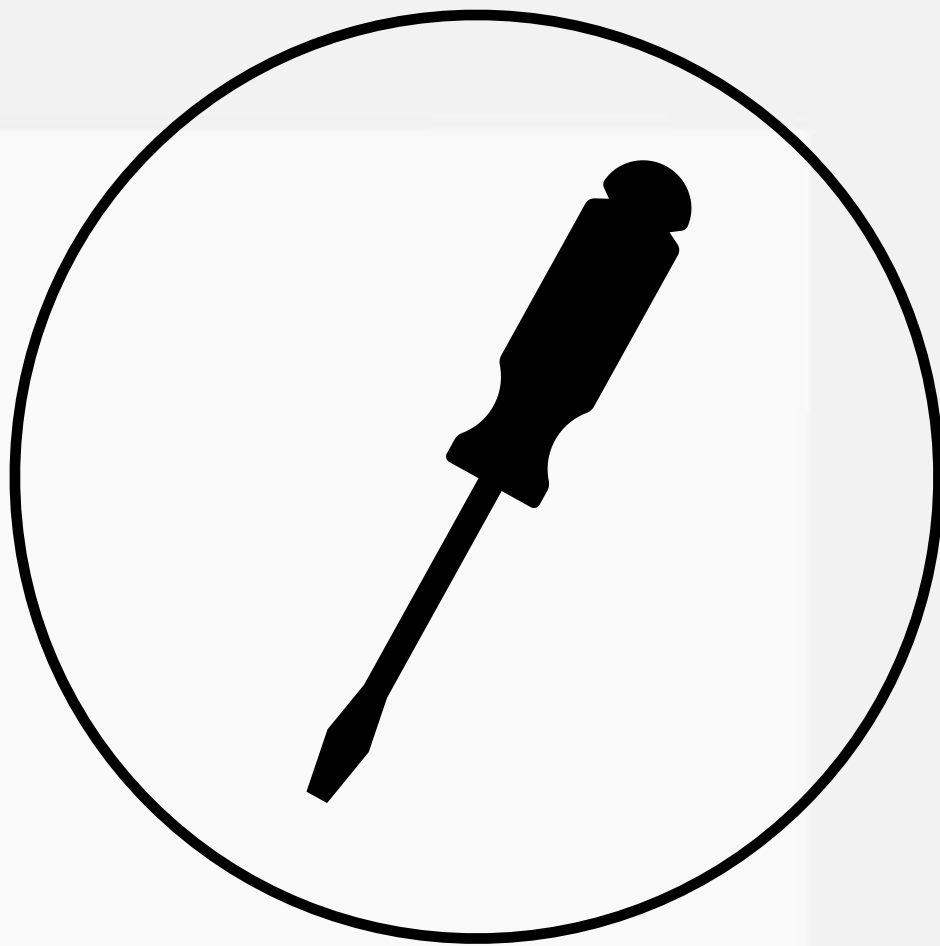
Installation Instructions

- 1. Prepare a Suitable Work Area: It’s important to prepare a clean, non-scratch surface to work on. This can be a lint-free cloth that will prevent scratches and damage to the FEP film. Ensure the area is free of dust and any sharp objects that could compromise the integrity of the film.
- 2. Remove the FEP Film from Packaging: Open the packaging and carefully remove the sheet of FEP film. Handle the film by the edges to avoid direct contact with the surface, which could leave fingerprints or transfer oils from your skin.
- 3. Peel Protective Layers: Each side of the FEP film is protected by a thin layer to prevent damage during storage and transport. Start at one corner and gently peel away the protective layer from one side. Repeat the process for the other side, making sure to touch the film as little as possible.
- 4. Installation of the Film: Align the film with the resin vat of your printer. Follow the manufacturer’s instructions closely for installation. The film should be installed without any wrinkles or bubbles to ensure optimal performance.
- 5. Check Film Tension: Once the film is installed, it is crucial to check that it is stretched taut across the vat. Gently tap the surface of the film with a finger. It should make a drum-like sound if properly tightened. Proper tension is key to achieving high-quality prints, as it affects the release characteristics of the film during the printing process.
- 6. Cleaning the Film: After installation, inspect the film for any smudges or fingerprints. Use a lint-free cloth to gently clean the surface. For fingerprints, lightly wipe with a lint-free cloth and isopropyl alcohol, then allow the surface to dry completely.

FEP Quick Start Guide



1. Remove Protective Layers



2. Install the Film



3. Check the Tension



4. Cut & Clean Film

Technical Specifications

Property	Typical Value
Film Thickness	0.15 mm
Density	2.15 g/cm³
Tensile Strength	20 MPa
Continuous Use Temperature	200°C
Elongation at Break	300%
Moisture Absorption	<0.01%
Kinetic Coefficient of Friction	0.1–0.3
Solar Transmission	96%
Refractive Index	1.341–1.347
Folding Endurance (MIT)	7,000 cycles

Head to Head | FEP vs. PFA (nFEP) vs. ACF Film

FEP	PFA (nFEP)	ACF
✓ Optical clarity	✓ Smooth release	✓ Very low peel force
✓ Lower cost	✓ Strong & durable	✓ High flexibility
✓ Chemical resistant	✓ Long flex life	✓ Fast release
✓ Broad compatibility	✓ High purity	✓ Low-stress separation
✓ Standard formats	✓ High transmission	✓ Large formats
✓ Proven performance	✓ Thermal stability	✗ Lower optical clarity
✗ Higher peel force	✗ Higher cost	✗ Careful handling
✗ Shorter flex life	✗ Premium price	✗ Easier to puncture

Disclaimer | The values provided herein are intended for specification purposes only and represent typical FEP film properties derived from recognised ASTM test methods and supplier literature. Monocure3D does not guarantee performance in specific applications. Given that product performance can vary, it is essential for each user to conduct their own testing to ascertain the suitability of the product for specific applications. The purchaser assumes all risks and liabilities associated with the use of this product. Store flat, clean and dry at ambient conditions, away from sharp objects and direct sunlight. Monocure3D is committed to delivering superior products; please [contact our support team](#) for expert application assistance.