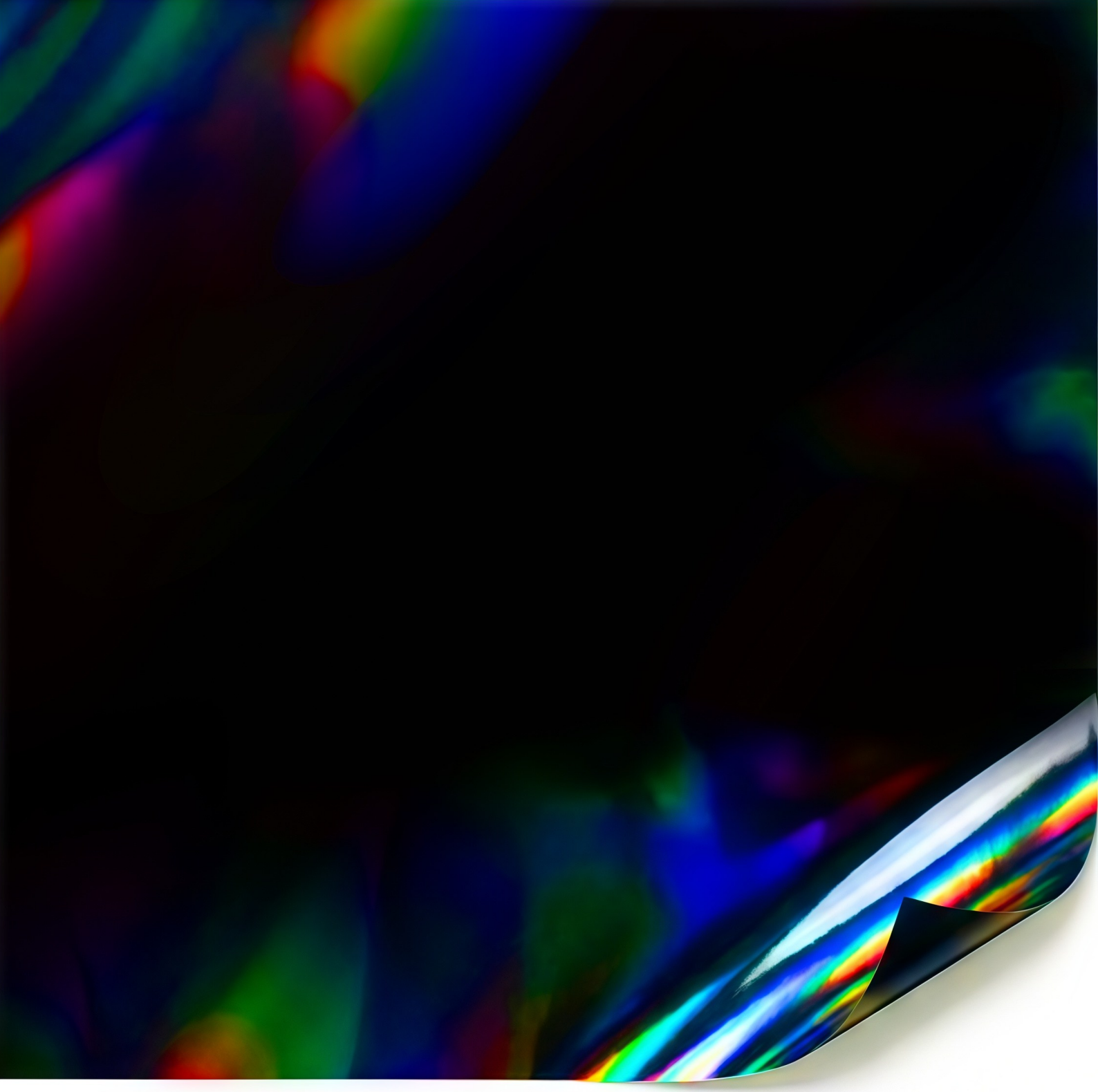


Color PPF - Laser Series

Technical Data Sheet（2026）

CNGfilm

PET Protective Film

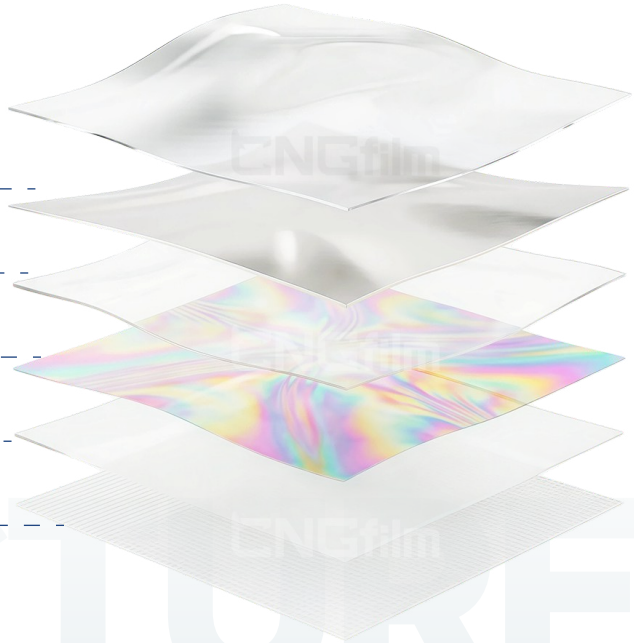
Self-Healing Coating Layer

Polycaprolactone TPU Layer

Laser Effect Layer

Acrylic Pressure Sensitive Adhesive

PET Release Liner



STRUCTURE

- Dynamic Color-Shifting Effect
- Premium Visual Impact
- Durable Surface Coating
- Stable Multi-Layer Structure

CNGfilm

Laser Series features dynamic color-shifting effects that change under different lighting angles, delivering a distinctive visual style with reliable paint protection.

Laser Series

ColorPPF

6 yrs
WARRANTY

Note: Rendered image for illustration purposes. Actual product may vary slightly.

Tensile Strength	Elongation at Break	Gloss Value(60°)
≥ 13 (MPa)	≥ 200%	≥ 90

PHYSICAL PROPERTY

ITEMS	DATA	TEST METHOD
Thickness (Protection Film)	50±5 μm	GB/T 7125
Thickness(Product)	198±5 μm	GB/T 7125
Thickness (PET liner)	75±5 μm	GB/T 7125
Hardness ≥85A	≥85A	GB/T 6739
Elongation at Break	≥200%	GB/T 1040
Elongation at Break(Coating)	≥85%	GB/T 1040
Tensile Strength	≥13MPa	GB/T 1040
Peel Strength	≥800gf	GB/T 2792

Characteristics

PROPERTY	DATA	TEST METHOD
Scratch Self-Healing	≤3min	Heat activation at 80°C
Acid & Alkali Resistance	No bubbling or cracking	10% HCl / 0.1 mol/L NaOH, 24h
Yellowing Resistance (ΔE)	≤2	QUV 2000h
Stain Resistance	No visible water marks	Rain simulation test
Hydrolysis Resistance	Pass	QC/T 1171-2021

Description of the Test Method

Thermal Self-Healing Test:

A 500 g weight is placed on a copper brush and moved three times across a painted test panel covered with paint protection film. The panel is then placed in an oven at 80°C, and the scratch recovery time is recorded.

Acid and Alkali Resistance Test:

10% Hydrochloric Acid and 0.1 mol/L Sodium Hydroxide Solution are applied to the surface of the test sample and left for 24 hours under natural conditions. The film surface is inspected for visible bubbles or cracking.

Stain Resistance Test:

Industrial water is used for contamination testing in equipment equipped with UV and heating functions, following the relevant provisions of GB/T 16422.2.

Hydrolysis Resistance Test:

The sample is placed in a constant temperature and humidity chamber at 85°C and 85% humidity.

Warranty

Warranty Coverage

This warranty covers:

- Cracking
- Delamination
- Manufacturing defects affecting film performance

Warranty Period

Up to 6 years depending on product series.

Warranty Conditions

The film must be professionally installed and used under normal automotive conditions.

Warranty Exclusions

This warranty does not cover:

- Color fading caused by extreme environmental exposure
- Improper installation
- Mechanical damage

General Warranty Disclaimer

This warranty applies only to defects in materials and manufacturing under normal use. CNGFilm reserves the right to inspect any product claimed under warranty before approving replacement. The warranty covers product replacement only and does not include labor costs or other related expenses.

Installation

Temperature: **25±3°C**	Humidity: **50±5%RH**

Clean, no visible dust and suspended particles

Installation Statements

Clean, no visible dust and suspended particles

1.Inspect the vehicle surface for any conditions that may affect installation. Any defects must be corrected before installation begins.

2.Thoroughly clean the vehicle surface to remove mold spots, oil, grease, stains and other contaminants.

3.Cut the film to the required size and remove the protective liner immediately before installation.

4.Remove air bubbles, wrinkles or lifting edges during installation.

5.If the installed film does not meet the required standard, it should be removed or replaced.

6.Clean surrounding surfaces and remove excess installation solution.

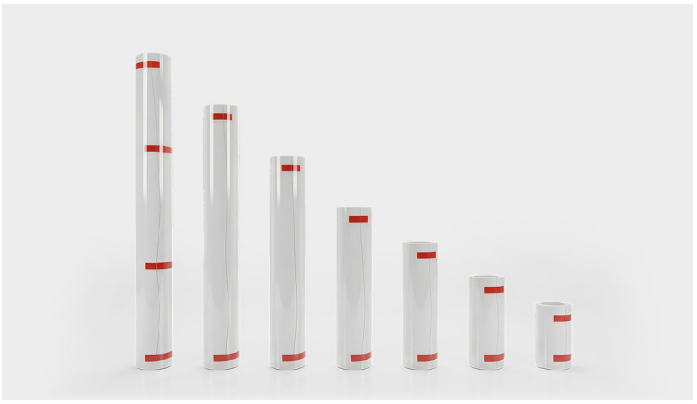
7.Avoid washing the vehicle within one week after installation, and prevent rainwater soaking to allow the adhesive to fully bond with the paint surface.

OEM & ODM Service

CNGFilm provides comprehensive OEM and private label services.

- Custom packaging design
- Brand logo printing
- Coil Core Code
- Roll Size
- Product specification customization
- Stable production supply

We support distributors and installers in building their own brands



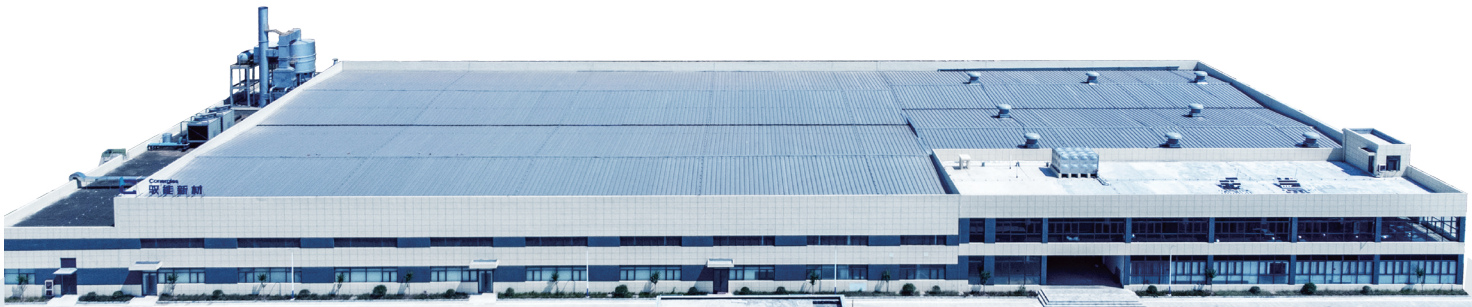
Note: Rendered image for illustration purposes. Actual product may vary slightly.

World-Class
PPF & Window Film Manufacturer

200+
BRANDS' TRUSTED CHOICE

70+
GLOBAL EXPORT MARKETS

10+
GLOBAL LEADERS' CORE SUPPLIER



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