Technical Data Sheet

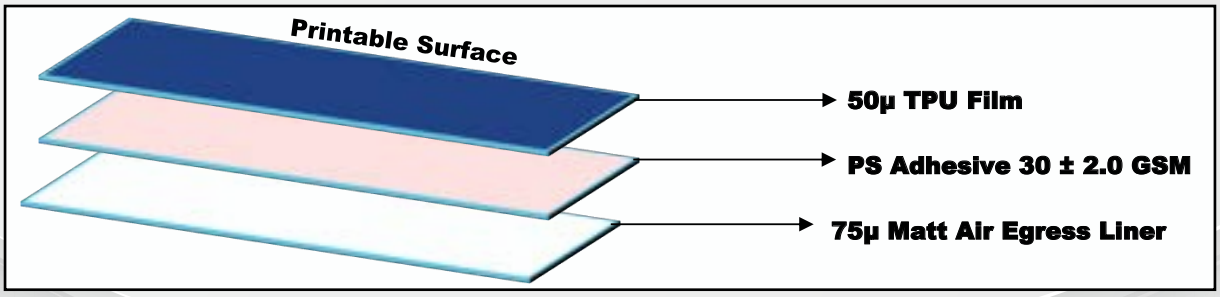
PRINTABLE PPF

Printable Paint Protection Film (Printable PPF) is an advanced thermoplastic polyurethane (TPU)-based film designed to combine high-definition digital printability with long-term surface protection. This system enables custom graphics while delivering superior durability, self-healing performance, and resistance to environmental damage.

The construction typically consists of a white and transparent printable TPU base film, which is over-laminated with a clear, self-healing TPU topcoat. This layered structure ensures that printed graphics remain vibrant while being protected from scratches, UV exposure, chemicals, and weathering.

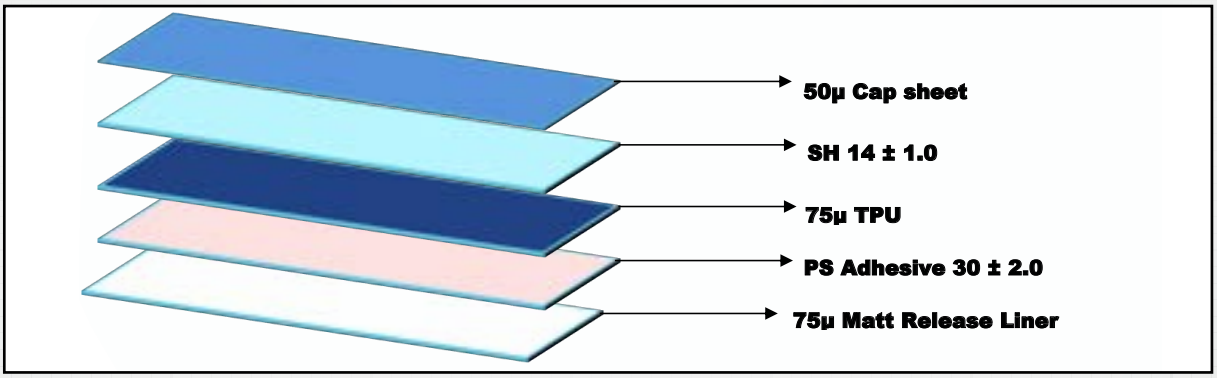
Printable PPF is widely used in automotive restyling, branding, and paint protection applications, offering both aesthetic flexibility and functional performance.

Product Construction:



Compatible Overlaminates:

3mil Clear Overlaminate: Enhances durability and yellowing resistance



Global Hi-Tech Films INC.
18302 Highwood Preserve Parkway Suite 115, Tampa, FL, 33647
+1-954.499.7990 | info@globalhitechfilms.com | www.globalhitechfilms.com

Performance Properties:

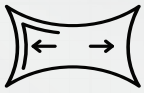
Sr. No.	Properties	Testing Standards	Measurement Unit	Typical Value
	Mechanical Properties			
1	Peel Strength: 20 min @ 24˚C	FTM 01	kg/in	>0.8 kg/ inch
2	Peel Strength: 72 hrs @ 24˚C	FTM 01	kg/in	>1.0 kg/ inch
3	Gloss at 60˚	ASTM D-2457	GU	>85
4	Tensile Strength	ASTM D-882	Mpa	>10
5	Elongation at break	ASTM D-882	%	>150
	Ageing Performance			
6	Heat ageing 80˚C/ 24 Hrs	Internal	–	Pass- No Detrimental Effect
7	Water immersion 40˚C/ 24 Hrs	Internal	–	Pass- No Detrimental Effect
	Stain Resistance			
8	Water and soap resistance Drop test for 10 min	Internal	–	Pass- No Detrimental Effect
9	Battery acid Drop test for 10 min	Internal	–	Pass- No Detrimental Effect
10	Diesel Drop test for 10 min	Internal	–	Pass- No Detrimental Effect
11	SAE Motor oil Drop test for 10 min	Internal	–	Pass- No Detrimental Effect
12	Hydraulic oil Drop test for 10 min	Internal	–	Pass- No Detrimental Effect

Dual Functionality
(Protection + Customization)

Excellent Printability

Self-Healing
Technology

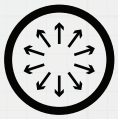
Superior
Durability



Excellent Flexibility
& Conformability

Chemical &
Stain Resistance

Strong Adhesion with
Clean Removability



Versatile
Application

Global Hi-Tech Films INC.
18302 Highwood Preserve Parkway Suite 115, Tampa, FL, 33647
+1-954.499.7990 | info@globalhitechfilms.com | www.globalhitechfilms.com

Difference between Printable Paint Protection film and Vinyl Film:

Features	GHFL Printable PPF	Vinyl Printable
Scratch Resistance	Excellent	Moderate
Self-Healing	Yes	No
Durability	5 years	3 years
Finish Quality	Premium	Standard

Roll Dimensions of Printable PPF (White and Clear variant):

Standard Roll Length	50 Feet
Available Widths	5 Feet
Total SQFT	250 SQFT

Roll Dimensions of Over Laminate (Clear):

Standard Roll Length	50 Feet
Available Widths	5 Feet
Total SQFT	250 SQFT

Storage & Handling:

Store at 20–30°C and 50% RH. Keep away from direct sunlight and dust. Use within recommended shelf life of 1 Year

Application Conditions:

Recommended application surface and ambient temperature: 20°C to 30°C.
Application should be carried out in a dust-free environment and away from direct sunlight.

Application Method:

Recommended dry application for installation.

Notes:
The values listed here are in typical values. They are intended only as a source of information. Prior to application, the user must determine the suitability of the product for its intended use and assumes all risks and liability. Refer PPF application manual for more details.

Global Hi-Tech Films INC.
18302 Highwood Preserve Parkway Suite 115, Tampa, FL, 33647
+1-954.499.7990 | info@globalhitechfilms.com | www.globalhitechfilms.com