

# **PHOTOLUMINESCENT MATERIAL**

## **TECHNICAL DATA SHEET**

Release 5, April 2023

#### **Product Description:**

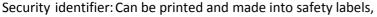
**Product Name**: Photoluminescent self-adhesive vinyls(PET type)

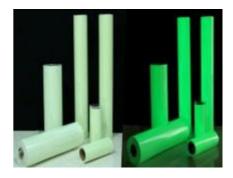
Product Model: HFG-P030, HFG-P050, HFG-P100,

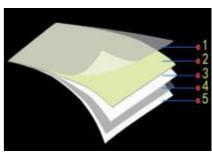
HFG-P150,HFG-P200

### **Application Scopes:**

The PL self-adhesive vinyl is a luminescent product produced on the basis of long afterglow photoluminescent powder, a component that is independently developed by Highviz. It is a photoluminescent film made of soft PET plastic, backed with adhesive paper, nontoxic and harmless. It dosen't contain any radioactive elements and is characterized by quick light absorption, longer afterglow and longer service life. Cut the PL film into different shapes, could applied in the following places: Indicate Position: It can be used to indicate its location such as Electrical switches, control panels, wall switches, plugs, sockets, locks, flashlights, door handles, handrails, fire extinguishing equipment, fire alarms Lifesaving Appliances etc.







- 1. PET transparent film
- **Emitting layer**
- White base
- 4. Adhesive layer
- Release paper layer

applied to Emergency evacuation channels, subway stations, underground tunnels, Civil Air defense works, karaoke halls, dance halls, cinemas, supermarket stores, hospitals, railway stations, airports, terminals and other places. Act as a security Warning and guide the escape path.

#### **Product Parameters:**

Light yellow Appearance: **Glowing color:** Yellow-green

1.23M \* 50M per roll. Size :

Tensile strength: ≥12 mpa

Back adhesiveness: >1.2 kgf/25mm (After 24 hours, 180° Adhesion)

Glow properties (Test Standard: DIN 67510-part 1,D65 Standard light source after being excited

for 5 min by 1000 LUX.)

Model	AFTERGLOW INTENSITY( mcd/ sqm)		AFTERGLOW TIME ( min)	Thickness ( mm)		Weight ( Kg/m²)
	10min	60min	(	Α	В	, 6.
HFG-P030	>30	>5	>400	0.16	0.28	0.34
HFG-P050	>50	>7	>800	0.16	0.28	0.35
HFG-P100	>100	>12	>1200	0.18	0.30	0.45
HFG-P150	>150	>20	>1800	0.21	0.33	0.49
HFG-P200	>210	>30	>2500	0.25	0.37	0.60

#### Instruction:

- 1. Afterglow time refers to the time required for the luminosity to decay to 0.32mcd/sqm.
- 2. Thickness A is not include paper layer; Thickness B is total thickness (include paper layer)

#### **Product Characteristics:**

- 1. Because the main material is acrylic and PET plastic, so this series of luminescent film is flammable, Non easy silk-screen.
- 2. The surface is very smooth, with very good cleaning performance (can be used detergent cleaning).
- 3. With excellent heat and cold resistance, can be applied to-20 $^{\circ}$ 65 $^{\circ}$ C environment.
- 4 Luminescent film has good physical and mechanical properties, excellent weather performance, outdoor life 4-6 years, 6-8 years in the indoor.
- 5. Luminescent film is instant paste, can be affixed to the surface of ordinary objects.

#### **Usage and Notice:**

- 1. Should be in the flat surface construction, the construction temperature should be 10~40°C.
- 2. The luminescent film can be cut into a variety of shapes, directly affixed to a place (such as telephones, switches, etc.) to play a decorative, indicative role.
- 3. The luminescent film surface is not easy to screen printing, if you need to use UV ink or special inks.
- 4. When affixed to the surface of the object should firstly clear the surface of the object, surface can not have oil, dust, etc.
- 5. The luminescent film has a certain thermal expansion. After slicing the light-emitting film can not be placed at will, should be clamped or heavy pressure, to prevent deformation and roll edge.
- 6. Remove the release paper of the luminescent paper when using. The luminescent film must be pressed and formed on the surface of the treated object.
- 7. Different batches luminescent film will have a certain color difference even it is the same type.
- 8. The length exceeds 10M will have the joint.
- 9. The surface of the luminescent film will accumulate ash for a long time, it will affect the luminous brightness. Using a small amount of clean water, regularly clean up the surface of luminescent film. It is prohibited to use solvent type to clean the luminescent film. Preventing the water enter the back of the film to avoiding it fall off.

