

IDENFOIL SAFETY

**TECHNICAL
DOCUMENTATION
for Photoluminescent Materials
2014**

TECHNICAL DATA SHEET

Product Description:	Photoluminescent PVC rigid sheet
Application Scopes:	Photoluminescent PVC rigid sheet can be cut into different shapes, printed through silk-screen techniques or digital flatbed and made into fire safety markings of all kinds.
Model:	MH-B-G150
Material:	PVC resin, photoluminescent pigment

Typical physical properties:

Appearance:	Light yellow
Glowing Color:	Yellow-Green
Weight:	1.7kg/sqm
Size:	Thickness: 1.1mm; 1m*1.2m each sheet
Tensile Strength:	≥35mpa

Glow properties:

Measurement according to DIN 67510 part 1

Afterglow intensity after	10min	>100 mcd/m ²
	60min	>10 mcd/m ²
	Decay time:	1200 min

Storage:

Storage: stored in ventilated, dry, and cool warehouse at an ambient temperature of 10-40°C.

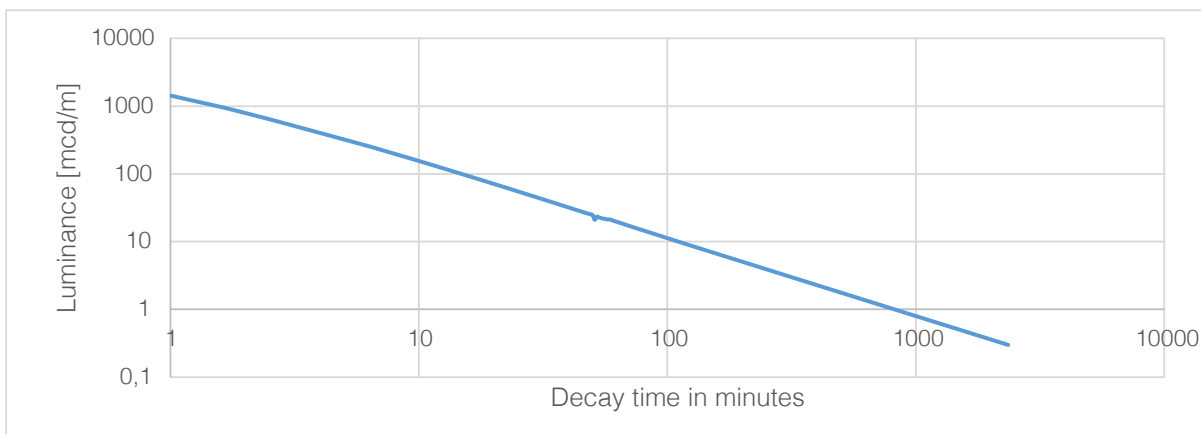
Measuring Protocol no: 1
 Product Designation: PVC SHEET
 Article/Sample.: MH-B-G150
 Type of material:
 Type of lighting source:
 Illuminance on sample: E = 999.7 lx
 Temperature: 20°C
 Filename: BG150.100
 Period of conditioning:
 Measurement performance: Size of measuring field:
 Date: Starttime: 14:09

Measurement according to DIN 67 510 Part 1

Luminance after 2 minutes: 790 mcd/m
 Luminance after 10 minutes: 154,6 mcd/m
 Luminance after 30 minutes: 44,7 mcd/m
 Luminance after 60 minutes: 20,6 mcd/m
 Luminance after 120 minutes: 9,1 mcd/m evaluated from readings \geq 15 minutes
 Luminance after 2353 minutes: 0,3 mcd/m evaluated from readings \geq 15 minutes (decay time)

Afterglowing characteristics: 790/ 154,6 / 20,6 – 2353

min	mcd/min	min	mcd/min	min	mcd/min	min	mcd/min	min	mcd/min	min	mcd/min	min	mcd/min
1	1427	13	115,7	22	63,85	31	43	40	31,95	49	25,29	59	21,24
2	790	14	106,5	23	60,68	32	41,45	41	31,04	50	24,68	60	20,64
6	267,5	15	98,5	24	57,78	33	39,99	42	30,18	51	21,01	120	9,1
7	227,4	16	91,6	25	55,13	34	38,62	43	29,36	52	23,4	2353	0,3
8	197	17	85,6	26	52,69	35	37,35	44	28,58	53	22,85		
9	173,5	18	80,2	27	50,45	36	36,14	45	27,84	54	22,34		
10	154,6	19	75,4	28	48,36	37	35	46	27,13	55	21,85		
11	139,3	20	71,1	29	46,44	38	33,92	47	26,45	56	21,74		
12	126,5	21	67,34	30	44,66	39	32,91	48	25,85	57	21,25		





VP 1587

Luminous Film

Description

Advantages

- Rechargeable "glow in the dark" signs and markings.
- Two available versions VP 1587-30 and VP-1587-50 with different luminance levels.
- Dimensionally stable, durable, multilayer film.
- Excellent chemical and stain resistance.
- Easily cleaned with 3M Citrus Base Cleaner (3M ID 62-4615-4930-5).
- No heavy metals or radioactive materials used in the manufacture of this product.
- May be safely disposed of in a sanitary landfill or by incineration.

Application and End Uses

Primarily intended for marking interior "glow in the dark" signs and markings, including safety signage in buildings, ships, ferries, railroads.

Limitations of End Users

3M™ Luminous Film VP 1587 is not intended or warranted for the following:

- Application surfaces subjected to gasoline spills and vapors
- Application to complex curved surfaces, corrugated surfaces or riveted surfaces.

Compatible Products

The following products can be used with VP 1587 luminous film:

- 3M™ Scotchlite™ Diamond Grade™ VIP Reflective Sheeting Series 3990
- 3M™ Scotchcal™ Film Series 100, 180, 3630, 3650, 3690
- 3M™ Application Prespacing Tape SCPS-2 and SCPS-100
- 3M™ Scotchcal™ Printing Inks: 1900 series

Characteristics

Property	Description
Visual Appearance	Glossy appearance, light yellow green color
Adhesive	Permanent pressure sensitive
Application surfaces	Flat, simple curved surfaces
Luminance (per DIN 67510 Part 4)	Exceeds luminance requirements specified in DIN 67510 Part 4 (valid for VP 1587-30 and VP 1587-50)
Application temperature range	10°C to 38°C
Thickness (film and adhesive)	0.2 - 0.22 mm
Service temperature range	-34° to 90°C
Applied shrinkage (FTM 14)	< 0.8 mm

Note: ISO refers to standards of the International Standards Organization. FTM (Finat Test Methods) refers to test method listed by Finat, the Association of European Tape Manufacturers.

Effective Performance Life

The durability of 3M™ Luminous Film VP 1587 depends on the following:

- Selection and preparation of the substrate
- Application methods
- Cleaning methods

Warranted Durability

10 years warranty for interior applications (without direct exposure to sunlight).