

Product Data Sheet

PERMALIGHT® Plus 55/8 Flexible Vinyl PVC

Photoluminescent Printable Substrate (Self-Adhesive)

SKU: 81-2509

Product Description

The PERMALIGHT® Plus 55/8 Flexible Vinyl PVC is a self-adhesive photoluminescent film designed for indoor and outdoor applications. Although it is not UL1994 listed, it is well-suited for maritime environments and general informational signage, offering consistent luminance performance and excellent printability for a wide range of custom applications.

Product Specifications

- **Material Class:** Photoluminescent Polyester, PERMALIGHT® Plus 55/8
- **Temperature Resistance:** 15°C to 50°C
- **Outdoor Durability:** 2 years*
- **Indoor Durability:** Virtually Unlimited

* Printed sign under vertical outdoor exposure and Central European standard climate conditions.

Durability in Outdoor Use – Assessment after 2 Years of Weather Exposure

- **Overall appearance:** Slight shine reduction, sign remains flat and even
- **UV stability color:** Minimal fading, 100% readability
- **Overall evaluation:** The entire combination withstands 2 years of outdoor use

Technical Data

- **Roll size:** 39.375" wide x 54.7 yards long
- **Thickness:** 0.353 mm
- **Adhesive:** Acrylic Adhesive

Luminance Values (DIN 67510 and UL1994)

Luminance 10 min after light outage	Luminance 60 min after light outage	Classification by manufacturer *** (10/60 min value)	Decay duration
55 mcd/m ²	8 mcd/m ²	Class B (20/3 mcd/m ²)	1800min / 30h

** According to DIN 67510-1:2020 – Long-lasting photoluminescent pigments and products, measurement and classification by the manufacturer.

Product Specifications (Cont.)

Wipe Resistance (Wipe test based on DIN 30643):

- Isopropanol: ✓
- n-Heptane: ✓
- Artificial hand sweat solution: ✓
- Fats and oils: ✓

Chemical Resistance (Immersion test based on DIN 30646):

- Distilled water (65°C): ✓
- 10% washing lye: ✓
- Cold cleaner: ✓
- Transformer oil: ✓
- Test gasoline 145/200: ✓
- Antifreeze: ✓
- Diesel: ✓

Application and Use

This self-adhesive photoluminescent film is specifically designed for indoor and outdoor use in non-code-required safety signage.

These sheets support a wide range of fabrication and printing methods, including:

- Informational signs (e.g., Fire Extinguisher, High Voltage, Tornado Shelter)
- Room identification (e.g., Electrical Room, Linen Closet)
- Directional arrows
- General-purpose signage for ships, ferries, and other marine vessels
- Screen printing with UV-dry or air-dry inks
- Digital printing with solvent-based or eco-solvent inks (not compatible with water-based inks)
- Application of plotter-cut vinyl graphics
- Cutting with high-speed or guillotine cutters
- Mounting using construction adhesives, double-sided foam tape, or mechanical fasteners

IMPORTANT NOTICE: For optimal print results, wipe the sheet with Isopropyl Alcohol to remove dust, oils, or surface contaminants before printing. Always test compatibility with your adhesives, inks, and processing systems prior to full-scale production. Failure to follow these instructions will void all warranties.

Cleaning Instructions

- Clean signs using a damp cloth soaked in a water solution with a mild, alkaline cleaning product (e.g., detergent)
- Do not use abrasive cleaning agents (e.g., scouring agents)
- Do not use alcohol or solvents

Receiving Instructions

Upon receiving a partial roll of **PERMALIGHT®** vinyl PVC, unroll and lay it flat on a clean, level surface. Allow the material to rest overnight to flatten and adjust to room temperature before starting the converting process.

Please note that partially cut rolls are repackaged by hand. Oils from skin contact may leave visible marks, so we recommend wiping the surface with isopropyl alcohol to remove dust, surface contamination, or any plasticizer migration before applying ink.

Every converting setup may require different machine settings. Refer to your equipment manual for the correct roller pressure, speed, and feed rate based on the sheet thickness. Always test the material with your specific printing process before beginning full production.

Storage Instructions

- When stored in the original unopened packaging at 23°C / 50% relative humidity and protected from sunlight, the product has a shelf life of 2 years.
- Mechanical damage and sharp bending should be avoided.

Failure to comply with these storage guidelines may reduce the product's lifespan.

Manufacturer

All marking products are manufactured in accordance with ISO 9001 and ISO 14001 and meet the highest quality standards. Selected parameters, such as weather resistance and chemical resistance, are tested in our in-house laboratory and monitored at regular intervals.

Important Notice: All PERMALIGHT products undergo rigorous quality control throughout the manufacturing process. We supply all products in commercial quality and free from manufacturing defects. Published product information does not constitute a guarantee of properties within the meaning of § 443 BGB. Given the wide range of applications and the continuous development of new uses, it is the user's responsibility to carefully evaluate the product's suitability and performance before use.

The buyer assumes all risks arising from the use of the product, particularly for obviously improper applications. Modifications are subject to change.