

# Product Data Sheet

## PERMALIGHT<sup>®</sup> Power Pro 250/30 Rigid PVC Sheet

### Photoluminescent Printable Substrate

SKU: 81-1077

#### Product Description

The PERMALIGHT<sup>®</sup> Power Pro 250/30 Rigid PVC Sheet is a UL1994 listed component for luminous egress path marking systems. This high-performance photoluminescent sheet is ideal for fabricating ADA-compliant Staircase Identification Signs and a variety of other code-compliant safety signage applications.

#### Product Specifications

- **UL Model:** CC-RIGID
- **Material Class:** HPVC, photoluminescent, PERMALIGHT<sup>®</sup> Power 250/30
- **Temperature Resistance:** -20°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

- **Sheet size:** 39.375 in x 47.25 in (Custom sheet sizes available upon request)
- **Thickness:** 1.1 – 1.3 mm

#### 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
250 mcd/m <sup>2</sup>	30 mcd/m <sup>2</sup>	Class C (140/20 mcd/m <sup>2</sup> )	1620 min / 27h

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

## Product Specifications (Cont.)

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### 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

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These sheets are specifically designed for use in harsh industrial environments. With a high resistance to chemicals, weathering, and wear, they are ideal for permanent, custom labeling and safety signage solutions.

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

- Insertion of Braille beads using the Raster method
- Digital printing with solvent-based and eco-solvent inks
- Screen printing with UV-dry and air-dry opaque inks
- Plotter-cut lettering applications
- Router cutting and punching into custom shapes
- Heat forming on a strip heater into 3D signs (L- or V-shaped wall signage)
- Use as a background for escape route or evacuation maps

**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

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- 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

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Upon receiving your PVC sheets, immediately unroll and lay them flat on a clean, level surface. Allow the material to rest overnight to flatten and acclimate to room temperature before beginning the converting process.

When ordering single sheets of **PERMALIGHT®** rigid PVC, please note that they are repackaged by hand. Oils from skin contact may leave visible marks on the surface.

Every type of converting equipment may require different settings. Refer to your machine's manual for proper roller pressure, feed speed, and other parameters based on sheet thickness. Always test the material with your printing process before starting full production to ensure compatibility and optimal results.

## Storage Instructions

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- 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

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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.