Technical Characteristics

Photoluminescent self-adhesive polycarbonate for public transport

1. Product

Everlux® - Photoluminescent safety signs for public transport.

2. Product Description

Self-adhesive photoluminescent polycarbonate film with 0.62 mm thickness, easy to clean.

3. Photoluminescent properties

The Everlux® products are fully conform to the International norms, such as Regulation no. 107 of the United Nations Economic Commission, ISO 17398 (Class C), DIN 67510-4 and ISO 16069 Resolution. When stimulated with 1000 lux during 5 minutes, the photoluminescent characteristics are as follows:

Time after removing the exciting light (in minutes)	Luminescent intensity (mcd/m^2)	
	Everlux[1]	Regulation 107/ ISO 17398 – Class C
2 minutes 10 minutes 30 minutes 60 minutes	850 150 45 20	690 140 45 20
Luminance intensity	**Everlux[1]**	Period of light decay (minutes)
0.3 mcd/m^2	2000 minutes	-

(1) The values presented may suffer a slight decrease by the effect of the non-slip layer.

4. Dimensions, Pictograms and Colours

The products are in conformity to our catalogue and according to National and International Norms and Legislation.

5. Printing

Serigraphy: high quality gloss paint with UV resistance

6. Installation

The installation of the product must follow the following indications:

Preparation of the application surface:
All surfaces on which signs are to be installed shall be considered as contaminated.

Cleaning and Degreasing - For this operation a degreasing solution must be used; for example, isopropyl alcohol in the proportion 70% isopropyl alcohol and 30% water.
The cleaning operation must be done in two phases:

- 1st apply the degreasing solution to the surface and clean the whole surface in circular movements with paper or cloth that does not leave residues, in order to remove dirt and grease.
- Apply the degreasing solution to the surface and clean only in one direction only.

Drying – Let it dry, waiting 2 to 3 minutes until all cleaning solution evaporates. Do not touch the previously cleaned and degreased surfaces with your fingers.

Product application

Removal of the protective paper from the sign adhesive - Remove the adhesive backing paper in one corner of the product without touching the adhesive.

Application of the product - Apply the sign in the previously prepared place, avoiding the formation of bubbles and exerting pressure throughout the sign area. It is recommended to use a roller for better distribution of forces throughout the surface.
The quality of the adhesion will depend on the amount of contact between the adhesive and the installation surface. A strong, homogenous pressure promotes union.
The application should be made at the room temperature between 15ºC and 25ºC, and never be less than 15ºC.
Once applied, at the recommended application temperature, possible temperature changes are generally well tolerated by the glue, without modifying the adhesion properties of the glue.

Adhesion time - Until adhesion is considered complete, some time is required: approximately 50% final adhesion is obtained after 20 minutes, 90% after 24 hours and 100% after 72 hours (at room temperature).

Caution - before installation it is essential that the installer evaluate the surface where the signs are to be installed:

Rough or porous surfaces
A rough or porous surface will not allow the application of self-adhesive elements and may require other installation type.

Parallelism of the surface to be installed
Surface parallelism is essential to adhesion quality. On surfaces where there is no complete parallelism, the need for alternative installation solutions such as mastic glue or structural glue, or bolting to support structures or directly to the surface, must be considered.
Curved Surfaces
Self-adhesive products are ideal for flat surfaces. Although the application on curved surfaces is possible, it must be verified in each case whether the tension created by the curvature of the surface does not exceed the adhesiveness of the product.
Special surfaces
Some surfaces have special characteristics such as the presence of coatings that impart specific characteristics to the surfaces. This type of surface usually has a low surface energy and may require special preparation (eg primary application). It is the responsibility of the installer to evaluate the surface and, if necessary, to ask the manufacturer for instructions on the correct preparation of the surface.
Examples are the following materials: Polypropylene (PP), Polystyrene (PS), Polyolefin Thermoplastic (TPO), Polytetrafluoroethylene (PTFE), Polybutylene Terephthalate (PBT), Polyvinylidene Fluoride (PVDF), Polyurethane (PU), among others

Once installed, the product tolerates a temperature variation between -40°C and + 70°C.

7. Cleanliness

The products do not require any particular attention, clean with a dry clean cloth or a cloth humidified with water (without detergents).

8. Guarantee

Under suitable conditions of application and in indoor environment and proper cleaning, a guarantee of 5 years is provided against defects of manufacture.

Exposure to the following conditions may affect the durability of the product:
- Submersion or jets of water, as well as humid environments and leaks may reduce the strength of the product and as such the warranty period.
- For outdoor applications, considering the possibility of exposure to temperature and other extreme environments, this period may be shortened.

For a longer product life, consideration should be given to the type and state of the application surface, the type of movement to be subjected and the methods of cleaning. Refer to point 6 of this data sheet.

9. Health and safety

The product does not contain any radioactive substances.
In toxic terms the product is considered as safe (European norm EN 71-3).

10. Quality

The quality of Everlux® products is ensured by a rigorous process of quality control with tests in our own laboratory observing all applicable norms.

11. Legislation and Normative references

Everlux® safety signs are in conformity to the following norms:

- Regulation no. 107 of the United Nations Economic Commission for Europe (UNECE)
- EN ISO 7010
- ISO 3864 part 1 to 4
- Regulation (EC) No 1371/2007 of the European Parliament and the Council of the European Union of 23 October 2007