

## PRODUCT CLASS

CPL plastic laminate.

## DESCRIPTION

EOS<sub>laminato</sub> is obtained by laminating a special acrylic film with various layers of Kraft impregnated paper as a support, according to the required thickness.

Thanks to Electron Beam Curing technology (EBC), the acrylic surface of EOS<sub>laminato</sub> gains extraordinary properties such as: anti fingerprint, high scratch resistance, light fastness, no bacterial proliferation, high resistance to solvents and chemical reagents.

Any small traces of grease can be eliminated very easily thanks to the oleophobic properties of EOS Laminato

These technical features, joined with its Soft and Supermatt surfaces, make EOS Laminato a cutting-edge product in the world of interior design appreciated by architects and designers.

Last but not least, EOS<sub>laminato</sub> is a Phenol Free product, an additional choice for environment protections and consumers health confirming Neodecortech spa commitment toward the green chemistry.

## ADVANTAGES

- Surface with higher chemical and mechanical resistance;
- Applicability with all kind of plants used in the lamination business (however the customer is recommended to test in advance).

## APPLICATIONS

EOS<sub>laminato</sub> is a product particularly suitable for coating vertical and horizontal flat surfaces;

### Supports:

Chipboard, MDF and Plywood are particularly suitable surfaces because, like EOS<sub>laminato</sub> they are cellulose based and therefore have similar dimensional swelling.

### Bonding:

EOS Laminato can be glued to these surfaces, mainly through:

Thermoplastics: PVAc - Polyvinyl acetate (especially in industrial bonding), Neoprene, Hot Melt;

Thermosetting agents: Urea-formaldehyde, PUR, resorcinol or epoxy resin.

Before bonding, both laminates and substrates must be cleaned and free from any traces of dust, grease, particles or other impurities that could cause defects, bubbles or stains on the surface of the finished panel.

Pre-conditioning the laminate at the temperature and humidity conditions of the place where the gluing process will be performed. However, it is not advisable to paste the laminate if the temperature is <15 ° C.

### Gluing process with cold presses:

A limited pressure of 2-5 kg / cm<sup>2</sup> on the surface of the panel is applied. The laminate bonding times are long enough to allow the glue to complete its hardening cycle. Ex: PVAc D3 (waterproof) 40-60 min + 20 ° C.

### Gluing process with hot presses:

Typically, a pressure of 2-5 kg / cm<sup>2</sup> and a temperature of 40-60 ° C is applied. The laminate bonding times are shorter in the order of a few minutes.

Ex.: PVAc D3 (waterproof) 12 - 25 min + 40 ° C; 6 - 15 min + 60 ° C.

However, the panels should be cooled before proceeding with the cutting work.

These indications are provided for general information purposes. It is the responsibility of the user to find the most appropriate process conditions.

Therefore, a preventive test is recommended, regardless of the type of glue and pressing plant used.

If in the backside it is not used a EOS acrylic laminate but a melamine laminate or another product, preventive tests are compulsory for testing and verifying the flatness of the finished panel.

EOS<sub>laminato</sub> can be used for the coating of furniture items that frequently come into contact with hands or with products containing oils and greases such as kitchen tables, desks, doors and kitchen doors, chest of drawers ... etc.

The product is suitable for all common use in interior design.

EOS<sub>laminato</sub> in the MED version is suitable for naval use. It is certified by LAPI S.p.A; certificates 0987 / MED-B / 546 (module B) and 0987 / MED-D / 466 (module D). EOS<sub>laminato</sub> is suitable for all common uses in interior design.

## SIZES

Supplied in sheets of size: length 1.300 mm and width up to max 6.100 mm.

## TECHNICAL CHARACTERISTICS

The technical characteristics are shown up in the table n° 1.

## PACKAGING AND STORAGE

EOS laminato is supplied in sheets on pallets, which are wrapped with polyethylene and a shock-proof packaging. The stability of the laminate is assured for twelve months, if kept in its original packaging and in proper environmental conditions (temperature 10 – 25°C and relative humidity 50 – 60 %).

## NOTES

The information contained in this document are based on our current knowledge and experiences. However, they cannot be considered as exhaustive, but purely indicative. We suggest to test the product in advance on your own plant and to report eventual unqualified material before proceeding with further productions. Neodecortech S.p.A. cannot be considered as responsible for any eventual damage deriving from the use of the above mentioned product.

## TECHNICAL DATA

EOS laminato

TECHNICAL PARAMETERS <sup>(1)</sup>			
PROPERTIES		Unit/class/level	Value
1	<b>Thickness tolerance</b> Acc. EN 438-2 / 16 § 5	mm	±0,10 mm for thickness 0,5 ≤ t ≤ 1,0 ±0,15 mm for thickness 1,0 < t ≤ 1,0
2	<b>Light resistance</b> Acc. EN 438-2/16 § 27	grey wool scale	4
3	<b>Stains resistance</b> Acc. EN 438-2/16 § 26	class	≥ 4
4	<b>Scratch resistance</b> Acc. EN 438-2/16 § 25	class	≥ 4
5	<b>Abrasion resistance</b> Acc. EN 438-2/16 § 10	WR cycles	200
6	<b>Steam resistance</b> Acc. EN 438-2/16 § 14	class	5
7	<b>Dry heat resistance (160 °c)</b> Acc. EN 438-2 / 16 § 16	class	≥ 4
8	<b>Wet heat resistance (100 °c)</b> Acc. EN 438-2/16 § 18	class	≥ 4
8	<b>Crash resistance to small diameter ball</b> Acc. EN 438-2/16 § 20	N	28
9	<b>Crash resistance to small diameter ball<sup>(2)</sup></b> Acc. EN 438-2/16 § 21	mm	9,3
10	<b>Formaldehyde emission</b> Acc. ISO 12460-3:2015	mg/m <sup>2</sup> x h	0,3

<sup>(1)</sup> The checked data applying the methods established by the regulation UNI EN 438-2 can be different from the minimum requisites set by UNI en 438-3 for HPL laminates;

<sup>(2)</sup> Height fall of the ball = 1000 mm