

Luxe[®] by ALNIC

PATENTED PRODUCT

comparative
with other
surfaces
for manufacture of
furniture
and **paneling**



 Spanish Brand

ISO 9001
ISO 14001
BUREAU VERITAS
Certification



ALNIC

Decorative panel of high gloss or supermatte finishes:

Luxe® by ALNIC
PATENTED PRODUCT



High brightness: 95 gloss

High-gloss surface that produces an undistorted mirror effect in the absence of orange peel and with the highest scratch resistance.



Supermatte: 3 gloss

Surface with super matte finish, silky to the touch and high resistance to polishing and scratching for everyday use.

Note:
Measurements
taken at 60°
according to
International
Standard
ISO-2813

Physical mechanical properties
Health properties
Environment

 High scratch resistance (high gloss) 7,5 Newtons According to European Standard EN-14323:04	 High resistance to chemical agents Class 1B According to German/CEE Standard DIN-68861-1:81	 Colorstability Gray Scale: 5 Blue Scale: 8 According to European Standard EN-14323:04	 Traceability of the product and surface quality control by artificial vision	 No differences in color between batches $\Delta E < 0,50$ (*) According to Standard CIELab D65/10°
Without Phthalates	Without PVC or similar products	Low content of VOCs	100% REACH Compliance	Available CARB-P2 Board
100% recyclable	Always FSC-CW Board	Available FSC Board	Available PEFC Board	AIDIMA, TÜV, FCBA, BVC Certificates

(*) For white and magnolia. The rest $\Delta E < 0,70$.

High scratch resistance **7,5 Newtons** **Grade 5 (maximum possible)**

Test performed according to European standards EN-14323: 04 and EN-438-2 that define THE RESISTANCE THAT A SURFACE PRESENTS TO A SCRATCH DEEP ENOUGH TO BE EASILY VISIBLE ON A VERTICAL SURFACE, compared to other forms of evaluation, such as resistance to scratches, which are more representative and applicable to the wear and tear of horizontal work surfaces.



LUXE COMPARISON WITH OTHER HIGH GLOSS SURFACES

Standard EN-438-2

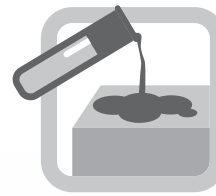
MELAMINE	PVC	PET	PLASTIC FOLIOS	ACRYLICS	HPL	TRADICIONAL LACQUER	Luxe®
Grade 3	Grade 2	Grade 2	Grade 3	Grade 1	Grade 3	Grade 3	Grade 5

* Test carried out in AIDIMA laboratory

High resistance to chemical agents:

Class 1B

Chemical Substance	Exposure	Result
Vinegar	16 hours	PERFECT
Citric Acid	16 hours	PERFECT
Sodium Carbonate	16 hours	PERFECT
Ammonia	16 hours	PERFECT
Ethanol	16 hours	PERFECT
Wine	16 hours	PERFECT
Beer	16 hours	PERFECT
Cola Drink	16 hours	PERFECT
Coffee	16 hours	PERFECT
Tea	16 hours	PERFECT
Gooseberry	16 hours	PERFECT
Milk	16 hours	PERFECT
Water	16 hours	PERFECT
Heptane	16 hours	PERFECT
Acetone	16 hours	PERFECT
Butyl Ethyl Acetate	16 hours	PERFECT
Butter	16 hours	PERFECT
Oil	16 hours	PERFECT
Mustard	16 hours	PERFECT
Sodium Chloride	16 hours	PERFECT
Onion	16 hours	PERFECT
Phenol	16 hours	PERFECT
Ink	16 hours	PERFECT
Marking Dye	16 hours	PERFECT
Detergent	16 hours	PERFECT
Cleaning Agent	16 hours	PERFECT



* Test carried out in AIDIMA laboratory

Color stability Grey scale 5 / Blue scale 8

The color is maintained over time and there is no discoloration under normal conditions of use. The color pigments used, thanks to its high stability, remain stable under prolonged exposure to light, including ultraviolet.

This characteristic allows you to change or extend components of the furniture, even time passed since its first installation, without appreciating a significant change.



Color stability between batches: $\Delta E < 0,50^{(*)}$

Each production batch is controlled through a spectrophotometer so there is no visible deviation regarding the corresponding color pattern, allowing the mixing of different batches, production, regardless of their date of manufacture. **LUXE uses not only UV drying, but also, IR drying, developed in I + D + I in ALVIC.**



(*) For white and magnolia. The rest $\Delta E < 0,70$.

Zenit
High Resistance Surface

High resistance to abrasion in Supermatte finish

With a degree 3B (700/850 cycles) of abrasion resistance according to European Standard EN-14323: 04, the Zenit supermatte finish is more resistant to deterioration by use, far superior to any matte surface such as PET, for example PVC. Moreover, this is achieved with the most intense matte finishes as it reaches the 3 gloss, compared to the 5 gloss of its closest competitors, with a very tactile silky feel.

In practice, these characteristics result in a product with outstanding properties that will remain intact throughout the useful life of the product.



Supermatte PET after abrasion



Supermatte ZENIT after abrasion



Surface control quality using artificial vision

To achieve maximum surface quality, this is automatically verified by the latest and most advanced artificial vision techniques. Thus inspection errors caused by human visual fatigue or inattention are avoided, etc.

Possible surface defects are automatically identified for further segregation, making the product to reach the final consumer free of surface defects.



CARB P2

All the boards manufactured by ALVIC have a low-formaldehyde E1 rate, however, any customer can request the use of CARB P2 board to further reduce such content.

FSC

Any of our products can be ordered with FSC certified board.

What is FSC?

The Forest Stewardship Council (with FSC) promotes a environmentally appropriate forest management, socially beneficial and economically viable management of the world's forests.

The objective is that the world's forests satisfy the rights and social, ecological and economic needs of the present generations without compromising those of the future.



The mark of responsible forestry



PEFC

Any of our products can be ordered with certified board PEFC.



What is PEFC?

PEFC (Program for the Endorsement of Forest Certification) is a non-governmental, independent, non-profit and global level entity that promotes sustainable management of forests to bring about social, economic and environmental balance.

The objective of PEFC is to ensure that the world's forests are managed responsibly, and that its many functions are protected for present and future generations. For which it has the cooperation of owners and forestry companies that, committed to the Certification of Forests and Industries are ensuring the sustainability of the sector.



FSC-CW Board

Absolutely all of the boards, both chipboard and MDF, that are used in the manufacture of products from our company are FSCCW certified.

What is FSC-CW?

It is a certification endorsed by FSC, which guarantees that the forest resources used in the manufacture of the boards do not come from controversial sources. The sources defined as conflictive are the following:

1. Illegal logging and trade in illegal timber and forestry products.
2. Violations of human or traditional rights in forest operations.
3. Destruction of high conservation values in forestry operations.
4. Significant conversion of forests to plantations or non-forest uses.
5. Introduction of genetically modified organisms in forest operations.
6. Violation of any of the main ILO conventions, as defined in the Declaration of the Fundamental Principles and Rights in the Work of 1998.

Absence of phthalates

In no case, the products manufactured and supplied by ALVIC contain phthalates.

What are phthalates?

Phthalates are one of the groups of substances that pollute households most frequently and which are found in virtually all of the westerners' organisms. They are substances of priority attention if we are to prevent health problems in the home.

There is plenty of scientific research that associates substances in this group to health problems, mainly due to its effects as hormone disruptors. Many times, the association was at very low concentration levels, present in large areas of the population.

REACH Compliance

The chemicals used in the manufacture of the full range of ALVIC products meet the REACH regulation.

What is REACH?

The European REACH Regulation governs the registration, evaluation, authorization and restriction of substances and chemical preparations, in order to ensure a high level of protection of human health and the environment, as well as the free movement of substances in the internal market.



Compliance VOCs legislation

All of the production processes performed in ALVIC comply with the existing legislation on VOCs, in our case, Royal Decree 117/2003, of January 31st on the limitation of emissions of volatile organic compounds due to the use of solvents in certain activities. This compliance is reviewed and verified annually by the competent authority.



What are the VOCs?

The volatile organic compounds (VOCs) are those hydrocarbons that are presented in a gaseous state at normal room temperature or that are very volatile at this temperature. VOCs can be considered as that organic compound that at 20°C has a vapor pressure of 0.01kPa or more, or a corresponding volatility under the particular conditions of use.

They usually present a chain with a number of less than twelve carbons and contain other elements such as oxygen, fluoride, chlorine, bromine, sulfur or nitrogen. Their number is over a thousand, but the most abundant in the air are methane, toluene, n-butane, i-pentane, ethane, benzene, n-pentane, propane and ethylene. They both have a natural (biogenic VOCs) and anthropogenic origin (due to the evaporation of organic solvents, the burning of fuels, transport, etc.).

Certificates

AIDIMA, TÜV, FCBA, BVC

LUXE AND ZENIT, are panels that are subjected to physical and mechanical tests established by the relevant regulations (chemical resistance, color stability, scratch resistance, etc.) for furniture in laboratories of the most prestigious European level: AIDIMA, TÜV, FCBA and BVC..



www.grupoalvic.com