

NOVODECOR® LABGRADE

Compacts for laboratory solutions

DESCRIPTION

NOVODECOR® Labgrade has an integrated decorative chemical resistant surface, making it nearly invulnerable to damage from harsh chemicals, solvents or other aggressive acid and alkali products. The decorative surface is obtained through acrylic resins cured by EBC Electron Beam Cured process.

Edge banding or protection is not required as the solid phenolic core is also impervious to chemical attack, and repeated cleaning never detracts from functionality or appearance.

NOVODECOR® decorative Compact according to EN 438 are a robust material for indoor surfaces, either horizontal or vertical. Its double-sided decorative panels meet the most demanding specifications being capable to endure high content of moisture and impact. The product meet the stringent requirements for hygiene, fire resistance, humidity resistance and mechanical properties. The surface of the Compact is antibacterial, validated accordingly to Japanese regulation JIS Z 2801.

Please check offer & service brochure for information on sizes and thicknesses available.

PROPERTIES



DURABILITY



SCRATCH
RESISTANT



LOW
EMISSIONS



ABRASION
RESISTANT



HIGH RESISTANCE
TO AGGRESSIVE
CHEMICALS



STAIN
RESISTANT

APPLICATIONS

NOVODECOR® Labgrade is regularly used in chemical, analytical, micro-biological, biochemical and medical laboratories as well as school and university laboratories in work surfaces, shelves and cabinet construction.



FOR PANELING



HEALTHCARE &
LABORATORIES



WORKTOPS

RECOMMENDATIONS

NOVODECOR® Compacts should be stored so they are protected from moisture, humidity and direct sunlight. The laminates should preferably be store flat in horizontal racks.

NOVODECOR® Labgrade, with their durable, hygienic and waterproof surface, require no special maintenance. The surface can be cleaned with warm water followed by wiping with a paper towel or soft cloth. Persistent contamination can usually be eliminated with non-abrasive household cleaners. They are resistant to most solvents and chemicals used daily at home. As Compact laminates are classified as non-hazardous, it is not necessary additional product description labels. Is a cured material and is chemically inert. REACH classification does not apply to them.

NOVODECOR® Compacts can be brought to controlled waste disposal sites according to current national and/or regional regulations.

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GENERAL FEATURES

PROPERTIES	TEST METHOD	UNIT (MAX OR MIN)		LABGRADE
Dimensional tolerance requirements (EN 438-2:2016, Clause No.)				
Thickness	EN 438-2.5	mm (max. variation)	$12.0 \leq t < 16.0$	± 0.60
			$16.0 \leq t \leq 20.0$	± 0.70
Length and width	EN 438-2.6	mm		+ 10/- 0
Edges straightness	EN 438-2.7	mm/m (max. deviation)		1.5
Edges squareness	EN 438-2.8	mm/m (max. deviation)		1.5
Flatness	EN 438-2.9	mm/m (max. deviation)	$t \geq 10.0$	3.0 mm /m
General Requirements				
Resistance to surface wear	EN 438-2.10	Revolutions (min.)	Inicial Point	450
Resistance to immersion in boiling water	EN 438-2.12	Appearance, rating (min.)		
		Surface	PEARL finish	4
		Edge	All thicknesses	3
		Mass increase% (max)	$t \geq 5.0$	2.0
		Thickness increase%(max)	$t \geq 5.0$	2.0
Resistance to water vapour	EN 438-2.14	Appearance, rating (min.)	PEARL finish	4
Resistance to dry heat (160 °C)	EN 438-2.16	Appearance, rating (min.)	PEARL finish	4
Dimensional stability at elevated temperature	EN 438-2.17	Cumulative dimensional change % (max.)	$t \geq 5.0$ Longitudinal	0.30
			$t \geq 5.0$ Transversal	0.60
Resistance to wet heat (100 °C)	EN 438-2.18	Appearance, rating (min.)	PEARL finish	4
Resistance to impact by large diameter ball	EN 438-2.21	Drop height, mm (min.)	$t \geq 6.0$	1800
Resistance to crazing	EN 438-2.24	Appearance (min.)	Grade	4
Resistance to scratching	EN 438-2.25	Force, rating (min.)	PEARL finish	3
Resistance to staining	EN 438-2.26	Appearance, rating (min.)	Groups 1 & 2 / Group 3	5
Light fastness (xenon arc)	EN 438-2.27	Contrast	Grey scale rating	4 to 5
Flexural Modulus	EN ISO 178	Stress, MPa (min.)	Longitudinal & Transversal	9000
Flexural Strength	EN ISO 178	Stress, MPa (min.)	Longitudinal & Transversal	80
Density	EN ISO 1183-1	Density, g/cm ³ (min.)		1.35
Reaction to fire	EN 13823 SBI	Rating	Standard	D-s2, d0

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TYPE OF CHEMICAL

RATING

Acids

Glacial acid 99%	Level 5: no visual change in gloss or colour
Formic acid 85%	Level 5: no visual change in gloss or colour
Hydrochloric acid 37%	Level 5: no visual change in gloss or colour
Nitric acid 65%	Level 4: slight visual change in gloss or colour
Phosphoric acid 85%	Level 5: no visual change in gloss or colour
Sulfuric acid 96%	Level 4: slight visual change in gloss or colour

Bases

Ammonia 28%	Level 5: no visual change in gloss or colour
Sodium Hydroxide 10%	Level 5: no visual change in gloss or colour
Sodium Hydroxide 20%	Level 5: no visual change in gloss or colour
Sodium Hydroxide 40%	Level 5: no visual change in gloss or colour
Potassium Hydroxide 25%	Level 5: no visual change in gloss or colour

Salts

Iron(III) chloride 10%	Level 5: no visual change in gloss or colour
Potassium permanganate 10%	Level 5: no visual change in gloss or colour
Silver nitrate 1%	Level 5: no visual change in gloss or colour
Sodium chloride 10%	Level 5: no visual change in gloss or colour
Sodium hypochloride 13%	Level 5: no visual change in gloss or colour

Halogens

Iodine 0,1N	Level 4: slight visual change in gloss or colour
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Organic Chemicals

Dimethylformamide > 99%	Level 5: no visual change in gloss or colour
Petroleum ether	Level 5: no visual change in gloss or colour
Hydrogen peroxide 3%	Level 5: no visual change in gloss or colour

Solvents

Acetone > 99,5%	Level 5: no visual change in gloss or colour
Ethanol 96%	Level 5: no visual change in gloss or colour
Methanol > 99,8%	Level 5: no visual change in gloss or colour
Dichloromethane > 99,8%	Level 5: no visual change in gloss or colour
Tetrahydrofurane > 99%	Level 5: no visual change in gloss or colour
Toluene > 99,5%	Level 5: no visual change in gloss or colour
Ethyl acetate > 99%	Level 5: no visual change in gloss or colour

Biologic Stains

Kongo red 1%	Level 5: no visual change in gloss or colour
Malachite green oxalate 1%	Level 5: no visual change in gloss or colour
Methylene blue 1%	Level 5: no visual change in gloss or colour

NOVODECOR® Laminates are classified in accordance with EN 438 – Sheets based on thermosetting resins (Usually called Laminates) – Part 4: Classification and specifications for compact laminates of thickness 2 mm and greater.

The use of NOVODECOR® laminates can contribute to the achievement of up to 2 LEED claims:

- The product contains recycled materials and can contribute to obtain LEED credits under MR Credit 4.
- Depending on the location of the construction project, the product can meet the requirements for materials extracted and manufactured regionally and contribute to obtaining LEED credits under MR Credit 5.

The information given in this TDS is correct at the time of publication (0519 EN).

The Company reserves the right to change specifications at any time without prior notification.