

SURFORMA® LABGRADE

Compacts for laboratory solutions

DESCRIPTION

SURFORMA® 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.

SURFORMA® 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 laminate surface is ANTIBACTERIAL, tested according to ISO 22196 and validated accordingly to Japanese regulation JIS Z 2801.

HPL are cured and therefore chemically inert. Laminates surfaces are physiologically safe and approved for use in direct contact with foodstuff.

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

APPLICATIONS

SURFORMA® 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.

PROPERTIES



LOW EMISSIONS



ANTI-STATIC



ABRASION RESISTANT



SCRATCH RESISTANT



STAIN RESISTANT



HIGH RESISTANCE TO AGGRESSIVE CHEMICALS



LIGHT RESISTANT



EASY TO CLEAN



DIMENSIONAL STABILITY



EASY TO MILL



DEEP ROUTERING

RECOMMENDATIONS

The advice and recommendations are of advisory nature only

Handling & Storage

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

Maintenance & Cleaning

SURFORMA® 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.

Transportation, Recovery and Disposal

In terms of transport regulations, HPL is not classified as a hazardous material; therefore, labelling is not necessary.

Laminates are an article and not a chemical substance and therefore the REACH regulation does not apply.

Due to their high calorific value (18-20 MJ/kg)¹ HPL are suitable for thermal recycling.

Laminates 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/cm3 (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

SURFORMA® 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.

Our due diligence system for tracing the origin of wood - FSC® & PEFC standards:

The well-known certification systems for sustainable forest management FSC and PEFC are equally evaluated by us to ensure traceability of timber throughout the supply chain, from harvest through to the finished product as a proof that the wood originally comes from certified and sustainably managed forests and other controlled sources.

In addition to providing assurance, FSC and PEFC certified materials can also support customers' LEED and BREEAM certification strategies.

CERTIFICATIONS

