



Technical Data Sheets

BiOpro

BioPro Compact Laminate Joinery

Technical Specification

BioPro is Novalab's compact laminate joinery range, specifically designed for use in PC2 and PC3 laboratory areas.

“The perfect solution for durable and water resistant joinery.”

Comprising of top-quality materials with excellent technical properties. They consist of cellulose selected papers, impregnated with resin and produced under heat and high pressure.

Comprises of quality materials with excellent technical properties:

- impervious to water, ideal for use in wet areas
- great colour range covering all of the top selling colours in market
- very strong and self supportive structural properties
- high density, providing extremely good impact resistance
- durable surface finish which is hard wearing with good scratch and scuff resistance
- hygiene, easy to clean and maintain

Meets the requirements of EN 438-2 and NEMA LD3-2000, and tested by PSB. (Singapore Productivity and Standards Board) and (Standard Industrial Research Institute of Malaysia).



CHEMICAL
RESISTANCE



DOES NOT
SUPPORT
BACTERIAL
GROWTH



COMPLETE
WATER
RESISTANT



IMPACT
RESISTANT



EASY TO
CLEAN



SUITABLE
FOR
CONTACT
WITH FOOD



SMOOTH
MACHINABILITY



QUICK
INSTALLATION

Solid and sturdy panels for
everyday use

Proven by third party evaluations

Proven by third party evaluations

Comparable to high
quality hardwood

Using various visible or
invisible fixing solutions



Chemical resistance properties

Bio Pro compact laminate is resistant to most common chemicals and substances. Test results meet the requirements of International Standard ISO 4586-2 which specifies resistance to staining by substrates which are encountered in daily usage and some aggressive materials commonly used in laboratories.

Performance

No visible effect

Slight Effect/No Effect if completely removed within 10 - 15 minutes

Surface Attack / Necessitating immediate removal

Chemical

Water, alcohol 96%, isopropanol, Petrol, amyl acetate, acetone, household soap, detergents for dishwashing by hand, ammonium hydrate 10%, ketchup, cooking oil, trisodium phosphate 1%, coffee, tea, milk, acetic acid, caustic soda (<10%), citric acid 10%, wine, lipstick, grapefruit juice, wax, shoe polish, ink ballpoint pen, spirit dye pen, marking ink, hand cream.

Hydrogen Peroxide 30%, hypochloric bleach, hair dye, mercury chromate 2%, iodine 0.1%, hydrochloric acid (<10%), caustic soda (>10%)

Hydrochloric Acid (>10%), nitric acid (>10%), Sulphuric Acid (>10%)

Physical properties

Density	Typical	1350 - 1450 kg/m ³	
Panel Tolerances	Length	±5 mm	DIN 16929
	Width	±5 mm	DIN 16929
	Thickness	±0.15 mm	DIN 16929
Thickness Swell	24hr at 20°C	0.1 %	EIN 317
Resistance to Surface Wear <i>Type of Abrader: S-33</i>	Initial	700	Clause 10 of EN 438-2
	Final	1225	Clause 10 of EN 438-2
Resistance to Impact by Large Diameter Ball	Height > 2000 mm	Rating 5	Clause 21 of EN 438-2
Resistance to Scratching		Rating 3	Clause 25 of EN 438-2
Resistance to Dry Heat, 180°C		Rating 5	Clause 16 of EN 438-2
Resistance to Water Vapour		Rating 5	Clause 14 of EN 438-2
Resistance to Immersion in Boiling Water	0.29 Thickness, 0.05 Mass	Rating 5	Clause 17 of EN 438-2
Dimensional Stability at Elevated Temperature in Machine Direction	Dry Heat	0.05 %	Clause 17 of EN 438-2
	High Humidity	0.05 %	Clause 17 of EN 438-2
Resistance to Cigarette Burns		Rating 5	Clause 30 of EN 438-2
Resistance to Crazeing		Rating 5	Clause 24 of EN 438-2
Flexural Strength	Machine Direction	118 MPa	ISO 178
	Cross-Machine Direction	156 MPa	ISO 178
Flexural Modulus	Machine Direction	9780 MPa	ISO 178
	Cross-Machine Direction	14800 MPa	ISO 178
Tensile Strength	Machine Direction	124 MPa	ISO 527
	Cross-Machine Direction	95.1 MPa	ISO 527
Elongation at Break	Machine Direction	0.8 %	ISO 527-4
	Cross-Machine Direction	1.0 %	ISO 527-4
Modulus of Elasticity	Machine Direction	14810 MPa	ISO 527-4
	Cross-Machine Direction	10900 MPa	ISO 527-4
Resistance to Staining	Reagents 1-4	Rating 5	Clause 26 of BS EN 438-2
Colour Stability	Blue Wool Standard	Min 6	AS/NZS 2924.1
Fire Hazard Indices	Ignitability Inde	CAS 10 - 12	AS/NZS 1530.3
	Spread of flame index	CAS 0 - 4	AS/NZS 1530.3
	Heat evolved index	CAS 2 - 4	AS/NZS 1530.3
	Smoke developed index	CAS 2 - 4	AS/NZS 1530.3

*Data in the physical properties table represents typical values and are to serve only as a guide for engineering design. Results are obtained under ideal laboratory conditions. Right to change physical properties as a result of technological progress is reserved.

Solid & Grains

Surface	Highly resistant decorative paper
Core	Black
Thickness	6 mm
	13 mm
Size	3660 mm x 1830 mm
Finish	Satin



Double sided decorative

Same colour for front and reverse side of the panel.



Environmental Certification



Certification No.
MyHP00037/17-B002



Bio fibre Composite
SIRIM CRITERIA 005:2010
Certification No. EL000074



Certification No. 042-033-2065
Environmentally Improved Low
Emission Low Toxicity

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