Technical Data Sheets

NOVAtek

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Compact Board

Technical Specification

Novatek is a high-density wood fibreboard with excellent physical-mechanical properites. Antibacterial, high resistance to humidity and fire retardant quality. If you require the material to be Fire Retardent to level 1-S, please specify Novatek FR).

The Metal-Mechanical, Furniture, Wood, Packaging and Related Technological Institute (AIDIMME) is a non-profit association established in 1984, which has one of the best Technological Institutes in Europe. A complete characterization of Novatek has been carried out in its laboratories, with evaluation of both the properties of the support and its covering. The Novatek product tested meets the requirements set forth in the following standards, applicable to kitchen and bathroom furniture:

- Novatek 56 842
- Novatek 56 843
- Novatek 56 867
- Novatek 56 868
- Novatek 19712-1

ANTIBACTERIAL SURFACE

FIRE RETARDENT QUALITY AVAILABLE

ENVIRONMENTALLY FRIENDLY: SUSTAINABLE AND RECYCLABLE MATERIAL EO5 / CARB2

HIGH RESISTANCE TO HUMIDITY (PASSES V313 AND V100 TESTS)

EXCELLENT MECHANICAL PROPERTIES (RESITANCE TO BENDING, INTERNAL BOND, IMPACT RESISTANCE

EXCELLENT QUALITY / COST RATIO

Antibacterial

The growing demand for products that prevent the development of bacteria that can be harmful to health has led us to work on researching materials that meet these requirements.

As a result of this work, NOVALAB has developed surfaces with antibacterial properties with its own resources.

The surface of Compacmel Plus E-Z has been tested by the external laboratory, the IMSL (Industrial Microbiological Services) of the United Kingdom, following the procedure indicated by the ISO 22196:

- 2011 Standard, verifying that our Compacmel Plus E-Z offers features that inhibit the growth and development of bacteria without impairing the characteristics of the covering.

The board has been tested with bacteria:

- S. aureus, which can cause a wide variety of diseases ranging from skin and mucous membrane infections to life-threatening diseases such as meningitis, pneumonia, etc.
- E. coli, which can cause diarrhea and intestinal problems.

Analysis certificate no. 1023308. 1E-1 - Issued by IMSL

Method: Determination of antibacterial activity using ISO 22196: 2011

Results (AS CFU CM -2)

Sample

	Contact	Contact	Time	Reduction	Log % difference
Compacmel Plus E-Z	E. coli	1.7E+04	≤1.0	≥4.2	>99.99%
	S. aurius	2.0E+04	≤1.0	≥4.3	>99.99%

The above data shows the difference between the initial population of bacteria after contact with the surface of the referenced samples for 24 hours at 35 °C and 95% relative humidity.

IMSL. Microbiological Industrial Services (UK). www.imsl-uk.com

Novatek - Fire Retardant (where Novatek FR is specified)

Properties	Test	Thickness (mm)			Units
		6	>6/12	>12/19	
Density*	EN 323	1050	1050	1050	Kg/m³
Internal Bond	EN 319	1.8	1.8	1.8	N/mm²
Modulus of elasticity	EN 310	55	55	55	N/mm²
Thickness swelling in water 24 hours	EN 317	1	1	1	%
Dimensional stability length / width	EN 318	0.40	0.40	0.40	%
Dimensional stability thickness	EN 318	6	6	6	%
Surface soudness	EN 311	1.7	1.7	1.7	N/mm²
Moisture content	EN 322	7+/-3	7+/-3	7+/-3	%
Silica content	ISO 3340	0.05	0.05	0.05	% Weight
Edge swelling	EN 13329	7	7	7	%
Reaction to fire Table 8 UNE EN 13986:2006+A1:2015	EN 13501-1	E	D-s2,d0(**)	D-s2,d0(***)	Class
Accelerated aging test (option 1). Swelling after cyclic test (v313)	EN 321 / EN 317	2	2	2	%
Accelerated aging test (option 1). Internal traction after cyclic test (v313)	EN 321 / EN 319	0.60	0.60	0.60	N/mm²
Accelerated aging test (option 2). Internal tensile after firing test (v100)	EN 1087-1 / EN 319	0.2	0.2	0.2	N/mm²
Sound absorption coefficient (250 to 500 Hz)	UNE EN 3986:2006+A1:2015	10	10	10	???
Sound absorption coefficient (1000 to 2000 Hz)	UNE EN 13986:2006+A1:2015	0.20	0.20	0.20	???
Thermal conductivity	UNE EN 13986:2006+A1:2015	0.19	0.19	0.19	W/ (m·K)
Acoustic insulation against aerial noise (R)	UNE EN 13986:2006+A1:2015	25	27	29	db
Water vapor resistance factor. Dry cup	UNE EN 13986:2006+A1:2015	43	43	43	μ
Water vapor resistance factor. Wet cup	UNE EN 13986:2006+A1:2015	30	30	30	μ
Biological durability	UNE EN 335	1 & 2	1 & 2	1 & 2	Use class
Pentachlorophenol content	UNE EN 13986:2006+A1:2015	<5	<5	<5	ppm

Tolerance on nominal dimensions					
Properties	**Test**	**Thickness (mm)**			**Units**
		6	>6/12	>12/19	
Thickness with respect to nominal value	UNE-EN 14323	+/-0.3			mm
Thickness in the same board	UNE-EN 14323	max-min <0.6			mm
Length and width	UNE-EN 14323	+/- 2 mm/m max 5.0 mm			mm
Flatness (only in balanced coverings)	UNE-EN 14323	-	-	2(e≥15 mm)	mm/m

Covering			
Properties	**Test**	**Thickness (mm)**	**Units**
Scratch resistance	UNE-EN 14323	≥2	N
Crack resistance	UNE-EN 14323	≥4	Grade
Resistance to staining (group 3)	UNE-EN 14323	≥4	Grade
Color fastness to UV light (xenon lamp)	UNE-EN 14323	>6	Blue scale n°
Dry heat resistance	UNE-EN 14323	≥4	Grade
Impact resistence	UNE-EN 14323	≥1500	Mm H
Antibacterial efficiency	ISO 22196	≥99.9	%
Visual defects			
Damage on edges	UNE-EN 14323	≤10 (****) ≤3(*****)	mm
Appearance flaws. Points	UNE-EN 14323	≤2	mm^2/m^2
Appearance flaws. Scratches	UNE-EN 14323	≤20	mm/m^2

Abrasion resistance			
Properties	**Test**	**IP number of turns**	**Class**
Abrasion resistance. Designs	UNE-EN 14323	<50	1
Abrasion resistance. Unicolors and finishes AH	UNE-EN 14323	<150	3A

(*) This data is considered indicative.
(**) Without air space behind Novatek for thicknesses greater than or equal to 9 mm. Classification D-s2,d2 with confined air space or free air space less than or equal to 22 mm behind Novatek ≥9 mm. Classification E for any other condition of use/thickness. According to decision 2007/348/CE.
(***) Without air space behind Novatek or for thickness greater than or equal to 18 mm in any condition. Classification D-s2,d2 for any other condition of use. According to decision 2007/348/CE.
(****) Commercial dimensions.
(*****) Boards cut to size.

These physical-mechanical values meet/improve the values established in the European standard EN 622-5:2009, Table 4. -Requirements for boards for general use in humid environments (Type MDF.H).

Product tested by the IMSL following the procedure indicated by the ISO 22196:2011 Standard, verifying that it offers features that inhibit the growth and development of bacteria without harming the characteristics of the covering.

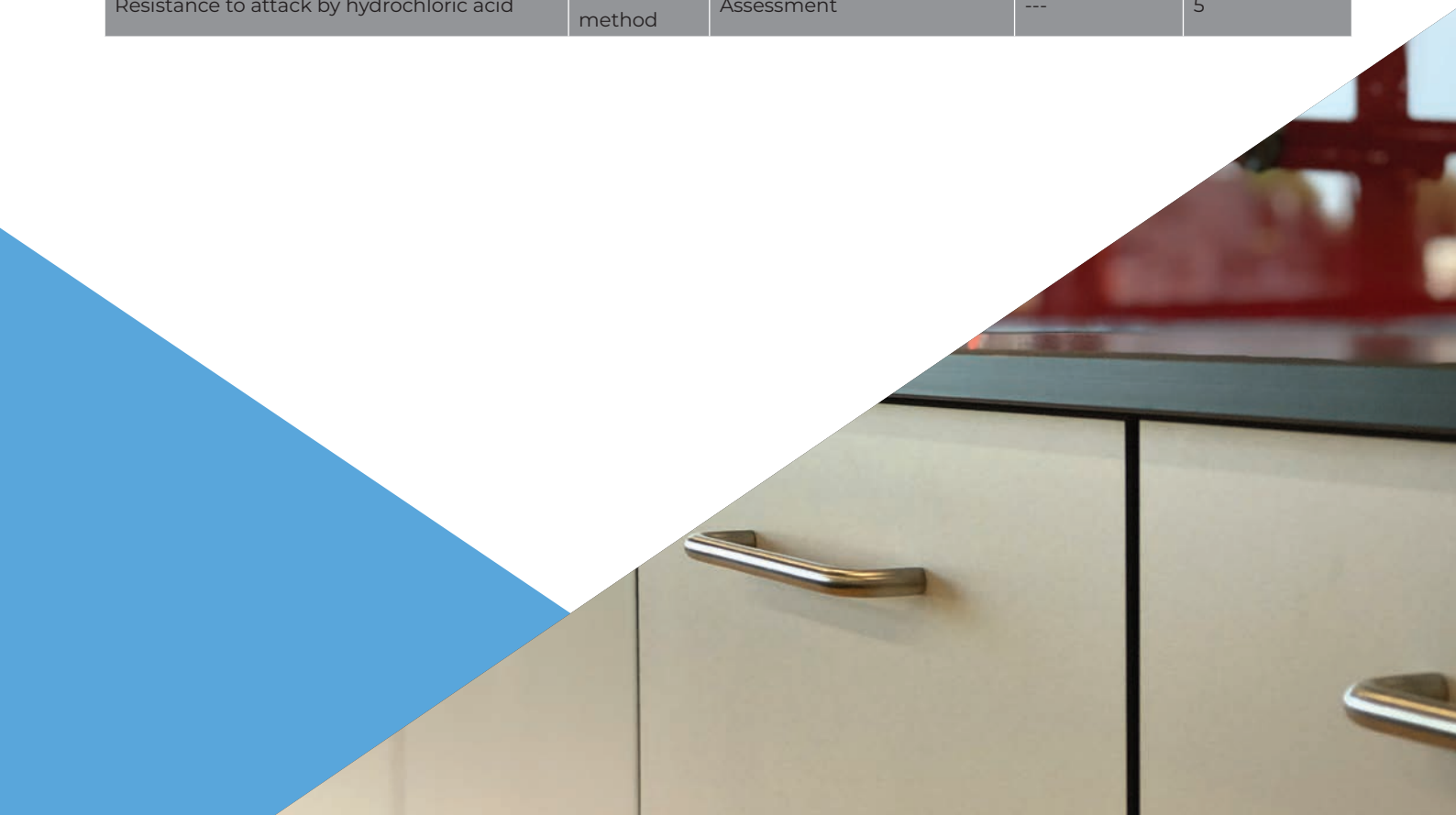
Novatek is a product with reduced formaldehyde emission E05 (< 0.05 ppm EN 717-1).

Novatek is US EPA TSCA TITLE VI and CARB Phase 2 compliant as it is manufactured by applying decorative paper to the Compac Plus E-Z backing board with US EPA TSCA TITLE VI and CARB Phase 2 compliance certificate issued by the TPC- 15.

Evaluation of the resistance of the covering

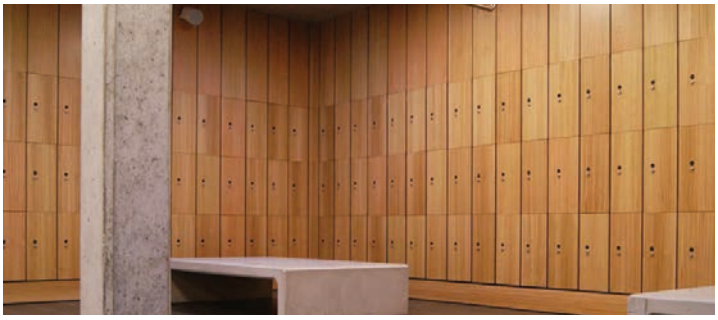
Reference White SR209

Characteristics	Standard		HPL standard requirement	Compacmel Plus E-Z
Appearance	UNE 56 867	Assessment	Zero defects	Zero defects
Stain resistance	EN 468-4	Group 1 agents / Assessment	≥5	5
		Group 2 agents / Assessment	≥5	5
		Group 3 agents / Assessment	≥4	5
Stain resistance / Bathroom furniture / Work spaces	UNE 56 842	Assessment	≤1	0
Stain resistance / Bathroom furniture / Toilet spaces	UNE 56 867	Colour assessment	≥4	5
		Gloss assessment	≥3	5
Abrasion resistance	UNE 438-4	Initial point IP (cycles)	≥150	900
		Resistance (cycles)	≥350	1150
Resistance to ball drop	UNE 438-4	Fall height (mm)	≥1800	≥2000
Resistance to ball drop / Kitchen furniture	UNE 56 842	Assessment	No cracks	No cracks
Resistance to ball drop / Bathroom furniture	UNE 56 867	Assessment	≤1	0
Resistance to ball drop / Solid surfaces	ISO 19712-1	Assessment	No cracks	No cracks
Colour fastness to light	EN 438-4	Grayscale / Assessment	≥4 - 5	5
Steam resistance. Colour / gloss assessment	UNE 56 867	Colour / Assessment	≥4	5
		Gloss / Assessment	≥4	5
Resistance to dry heat at 180 °C	UNE 56 867	Colour / Assessment	≥4	5
		Gloss. Assessment	≥4	5
Resistance to moist heat at 100 °C	EN 438-4	Other types of finishing / Assessment	≥4	5
Crack resistance	EN 438-4	Assessment	≥4	5
Cigarette burn resistance	EN 438-4	Assessment	≥3	5
Scratch resistance	EN 438-4	Smooth finishing	≥2	5
Thermal shock cycles	UNE 48025	Assessment	Zero defects	Zero defects
Resistance to attack by hydrochloric acid	Internal method	Assessment	---	5



Surface	Highly resistant decorative paper
Core	Black
Thickness	6 mm
	13 mm
Size	2850 mm x 2100 mm
Finish	Satin

Double sided decorative
Same colour for front and reverse side of the panel.



Environmental Product Declaration

Document that communicates the environmental impact of a material during its life cycle, from the raw material extraction process, transport to the manufacturing plant and product manufacturing process.

Cradle to Cradle

Multi-attribute certification, directly linked to Sustainable Development Goals (SDGs), demonstrating that a product is safe and circular.

The Material Health Certificate

This is a materials analysis based on the Cradle to Cradle standard health assessment methodology. This certification seeks to promote healthier and safer products.

Forestry certifications

PEFC
PEFC chain-of-custody certification provides a verified and independent guarantee that products with the PEFC label contain certified forest material from sustainably managed forests.

FSC®
We have implemented a FSC® chain of custody certification system that allows us to supply certified wood products to customers which are 100% recyclable and contribute greatly to the fight against climate change. This forestry certification promotes certified wood, and to this end we certify our farms and help our suppliers achieve certification.

EUTR

As a sign of transparency, we voluntarily certify compliance with EU regulation 995/2010 regarding the legal origin of wood.

ISO 38200

This is an internationally recognised standard for the transmission of information along the supply chain of wood and wood-derived products.

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