PURICELLI
DECORATIVE SURFACES

PURILAM ≤ 2 mm

DATA SHEET – MATERIAL PROPERTIES

PURILAM is a decorative high-pressure laminate (HPL) with a thickness of ≤ 2 mm. According to EN 438-1:2016, EN 438-2:2016, and EN 438-3:2016, it is commonly intended for the production of composite panels. The core consists of one or more layers of kraft paper impregnated with thermosetting resins. The single-sided decorative surface is made of colored or printed paper that is impregnated with aminoplastic thermosetting resins. The decorative and core paper layers are inseparably pressed into highly compressed, homogeneous, and pore-free sheets in static or dynamic high-pressure presses under high pressure and temperature. PURILAM is available in standard VGS version, flame-retardant VGF version, and post-formable VGP version according to EN 438-3:2016, all of them are suitable for vertical applications.

CHARACTERISTICS	TEST METHOD	ATTRIBUTE	VALUES	UNIT
GENERAL CHARACTERISTICS				
Surface Quality	EN 438-2:2016 Abs. 4	Stains, dirt and similar surface defects Fibers, hairs, and scratches	≤1 ≤10	mm^2/m^2 mm/m^2
Dimensional Tolerances	EN 438-2:2016 Abs. 5	Thickness (1)	± 0,10 0,5≤t<1,0 ± 0,15 1,0≤t<2,0	mm
	EN 438-2:2016 Abs. 6	Length and width	+ 10 / - 0	mm
	EN 438-2:2016 Abs. 7	Straightness of edges	≤1,5	mm/m
	EN 438-2:2016 Abs. 8	Squareness	≤1,5	mm/m
	EN 438-2:2016 Abs. 9	Flatness (measured on a full-size sheet)	60	mm
PHYSICAL CHARACTERISTICS				
Resistance to Immersion in Boiling Water	EN 438-2:2016 Abs. 12	Surface Appearance	≥3 High Gloss ≥4 Other Variants	Evaluation
Dimensional Stability at Elevated Temperatures	EN 438-2:2016 Abs. 17	Cumulative Dimensional Change	0,75 1,25	Longitudinal % (2) Transverse % (2)
Impact Resistance by Small Diameter Ball	EN 438-2:2016 Abs. 20	Spring Force	≥15	N
Impact Resistance by Large Diameter Ball	EN 438-2:2016 Abs. 21	Drop Height Impact Diameter	600 10	mm
Stress Cracking Susceptibility	EN 438-2:2016 Abs. 23	Appearance	≥4	Evaluation
Density	IN ISO 1183	Density	≥ 1,35	g/cm^3
SURFACE CHARACTERISTICS				
Resistance to Surface Wear	EN 438-2:2016 Abs. 10	Abrieb	≥50	Revolutions
	German Armed Forces Special Surface		≥350	
Resistance to Water Vapor	EN 438-2:2016 Abs. 14	Aussehen		Evaluation
Resistance to Dry Heat (160°C)	EN 438-2:2016 Abs. 16		≥3 Glanz ≥4 andere Ausführungen	
Resistance to Moist Heat (100°C)	EN 438-2:2016 Abs. 18			
Scratch Resistance	EN 438-2:2016 Abs. 25		2	
Stain Resistance	EN 438-2:2016 Abs. 26	Oberflächenveränderung	5 Gruppen 1 und 2 ≥ 4 Gruppe 3	
Lightfastness (Xenon Arc)	EN 438-2:2016 Abs. 27	Farbveränderung	≥4	Grayscale Evaluation
BUILDING MATERIAL CLASS				
Fire Behavior	The reaction to fire of PURILAM is related to the final composite panel, in which the laminate is bonded to a substrate material. The manufacturer of the composite material is responsible for conducting the tests in accordance with the applicable standards and testing methods required for the specific application field, as the test results also depend on the substrate material, the adhesive, and the bonding technique used.			
FOOD AND HYGIENE - CHARACTERISTICS				
Food Contact – Overall Migration	EN 1186	Acetic Acid 3% Ethanol 50% Ethanol 95% Isooctane	≤ 10	mg/dm^2
ENVIRONMENTAL CHARACTERISTICS				
Formaldehyde Emission	EN 13986	Formaldehyde Emission Class	E1	Evaluation
Emission of Volatile Organic Compounds	AFNOR NF EN ISO 16000-9	Classification	A+	Evaluation
		TVOC Emission (Total Volatile Organic Compounds)	≤ 0,2	mg/m^3
Phenol-Free (4)	AFNOR NF EN ISO 16000-9	Phenol Emission	≤ 0,002	mg/m^3

Anmerkungen

(1) t: t: Nominal thickness [mm]

(2) Longitudinal: parallel to the fiber direction (usually parallel to the sanding direction). Transverse: at a right angle to the fiber direction.

(3) Please contact the manufacturer for further details on the fire protection tests conducted and the available certificates.

(4) Phenol is not used as a raw material in PURICOMPACT production. 0.002 mg/m^3 is the detection limit (DL) of the test.

Note on PURILAM panels with self-adhesive protective film

The protective films are transport protection films and are conditionally designed for temporary surface protection against dirt, scratches, and tool markings; they are not intended for protection against corrosion, moisture, or chemicals. Laminates with the protective film should be stored in a clean, dry place (40 to 60% relative humidity) and at room temperature (20 to 25°C), avoiding weather influences and UV exposure.
The protective film must be removed no later than four months after the shipping date (from the Puricelli factory) and before mechanical processing such as drilling, sawing, milling, CNC machining, and assembly. Adhesive residues from the film can only be removed with increased effort after this period.
Puricelli assumes no liability for improper use of the protective film or for the consequences of non-recommended applications.