

TECHNICAL DATA SHEET Flame Retardant HPL ^{(1) (2)} [Version : 20/10/2023]

Product type :	Flame Retardant High-pressure decorative laminates (HPL-FR) (Decorative Range : Unilin Evola-HPL-FR; Unilin Evola Basic-HPL-FR; Customized Design Range)
Reference standard :	EN 438-3 : High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (usually called laminates) — Part 3 : Classification and specifications for laminates less than 2mm thick intended for bonding to supporting substrates.
Field of application :	HGF (Horizontal - General Purpose- Flame Retardant)

Essential Characteristic	Unit	Standard	Test Method	Thickness range (mm)
				0,9mm
Thickness variation relative to nominal value ⁽⁴⁾	mm	EN 438-3-table 4	EN 438-2-5	± 0,1
Length variation	mm	EN 438-3-table 4	EN 438-2-6	- 0 / +10
Width variation	mm	EN 438-3-table 4	EN 438-2-6	- 0 / +10
Flatness	mm/Lm	EN 438-3-table 4	EN 438-2-9	≤ 60
Straightness of edges	mm/Lm	EN 438-3-table 4	EN 438-2-7	≤ 1,5
Squareness	mm/Lm	EN 438-3-table 4	EN 438-2-8	≤ 1,5
Edge Damage : 4 Sides	mm	EN 438-3-6.2.4.2	EN 438-2-4	< 20
Surface Defects (points)	mm ² / m ²	EN 438-3-6.2.4.1	EN 438-2-4	≤ 1
Surface Defects (lines)	mm / m ²	EN 438-3-6.2.4.1	EN 438-2-4	≤ 10
Resistance to surface wear ⁽³⁾	Revolutions	EN 438-3-table 5	EN 438-2-10	IP ≥ 150
Resistance to impact by small diameter ball	N	EN 438-3-table 5	EN 438-2-20	≥ 20
Resistance to scratching	Rating	EN 438-3-table 5	EN 438-2-25	Smooth structure : ≥ 2; Other ≥ 3
Dimensional stability at elevated temperature	%	EN 438-3-table 5	EN 438-2-17	L ≤ 0,55 ; T ≤ 1,05
Resistance to immersion in boiling water	Rating	EN 438-3-table 5	EN 438-2-12	Gloss : ≥ 3 ; Other : ≥ 4
Resistance to dry heat (160°C)	Rating	EN 438-3-table 5	EN 438-2-16	Gloss : ≥ 3 ; Other : ≥ 4
Resistance to wet heat (100°C)	Rating	EN 438-3-table 5	EN 438-2-18	Gloss : ≥ 3 ; Other : ≥ 4
Resistance to staining	Rating	EN 438-3-table 5	EN 438-2-26	Group 1,2 : 5 ; Group 3 : ≥ 4
Light fastness (xenon arc)	Rating	EN 438-3-table 5	EN 438-2-27	4 - 5
Resistance to water vapour	Rating	EN 438-3-table 5	EN 438-2-14	Gloss : ≥ 3 ; Other : ≥ 4
Density	g/cm ³	EN 438-3-table 5	EN ISO 1183-1	≥ 1,35
Resistance to blistering	Sec	EN 438-3-table 6	EN 438-2-33	≥ 10
Fire reaction	Class	EN 438-3-table A.1	EN 13501-1	B-s2,d0

(1) The data mentioned above is intended for information only and based on our in house experience till now. This does not constitute a 100% guarantee in terms of product features.

(2) Please always validate samples via a test order when creating furniture. In any case, UNILIN cannot guarantee a perfect colour and/or surface match between HPL, Melamine faced board or Edging tape and will not be able to accept any claim on it.

(3) To ensure colour fastness, the specific properties of metallics (760M01, F992M01, F993M01, F994M01) meet VGF values so are exclusively used in vertical applications.

(4) For structure V2A, a thickness of 1,0mm +/- 0,1mm must be taken into account

Informative Characteristic	Unit	Standard	Test Method	Thickness Range (mm)
				0,9mm
Emission classification France	Class	Decree of 19.04.2011	ISO 16000-9	A+
Formaldehyde emission regulation Germany	ppm	ChemVerbotV 2020	EN 16516 / EN 717-1	≤ 0.1 (ISO 16516) / ≤ 0.5 (EN 717-1)
Food safety	-	(EU) No 10/2011	EN 13130-1/ EN 1186	Conform
Antibacterial activity ⁽⁵⁾	Reduction %	ISO 20743	ISO 22196	> 99.9%

(5) Not applicable for Unilin Evola Basic