

TECHNICAL DATA SHEET Flame Retardant HPL ^{(1) (2)} [Version : 01/12/2021]

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|------------------------|---|
| 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 | 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 |
| Resistance to cigarette burns | Rating | EN 438-3-table 5 | EN 438-2-30 | ≥ 3 |
| Density | g/cm ² | EN 438-3-table 5 | EN ISO 1183-1 | ≥ 1,35 |
| Resistance to blistering | Sec | EN 438-3-table 6 | EN 438-2-23 | ≥ 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.

| 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 ⁽⁴⁾ | Reduction % | ISO 20743 | ISO 22196 | > 99.9% |

(4) Not applicable for Unilin Evola Basic