

PURICOMPACT

MATERIAL PROPERTIES DATA SHEET

PURICOMPACT is a high pressure decorative laminates (HPL), having thickness 2 mm or greater, according to EN 438-1:2016, EN 438-2:2016 and EN 438-4:2016. The core is composed of layers of kraft paper impregnated with thermosetting resins. The decorative surface in both sides is made of paper impregnated with aminoplastic thermosetting resins. All the layers are bonded together by a high pressure and high temperature process to obtain a high density homogeneous non-porous material. PURICOMPACT is available in standard CGS type and flame retardant CGF type according to EN 438-4:2016.

| PROPERTIES | TEST METHOD | PROPERTY OR ATTRIBUTE | CGS - CGF | | UNIT |
|--|-----------------------|---|--|--|--|
| | | | VALUES | | |
| GENERAL PROPERTIES | | | | | |
| Surface quality | EN 438-2:2016 Par. 4 | Spots, dirt and similar surface defects Fibers, hair and scratches | ≤ 1 ≤ 10 | | mm ² /m ² mm/m ² |
| Dimensional tolerances | EN 438-2:2016 Par. 5 | Thickness ⁽¹⁾ | ± 0,20 ± 0,30 ± 0,40 ± 0,50 ± 0,60 | 2,0 ≤ t < 3,0 3,0 ≤ t < 5,0 5,0 ≤ t < 8,0 8,0 ≤ t < 12,0 12,0 ≤ t < 16,0 | mm |
| | EN 438-2:2016 Par. 6 | Length and width | + 10 / - 0 | | mm |
| | EN 438-2:2016 Par. 7 | Straightness of edges | ≤ 1,5 | | mm/m |
| | EN 438-2:2016 Par. 8 | Squareness | ≤ 1,5 | | mm/m |
| | EN 438-2:2016 Par. 9 | Flatness (measured on full-size sheet) | ≤ 8,0 ≤ 5,0 ≤ 3,0 | 2,0 ≤ t < 6,0 6,0 ≤ t < 10,0 t ≥ 10,0 | mm/m |
| PHYSICAL PROPERTIES | | | | | |
| Resistance to immersion in boiling water | EN 438-2:2016 Par. 12 | Mass increase | ≤ 5 ≤ 2 | 2,0 ≤ t < 5,0 t ≥ 5,0 | % |
| | | Thickness increase | ≤ 6 ≤ 2 | 2,0 ≤ t < 5,0 t ≥ 5,0 | % |
| | | Surface appearance | ≥ 3 ≥ 4 | gloss finish other finishes | Rating |
| | | Edge appearance | ≥ 3 | | Rating |
| Dimensional stability at elevated temperatures | EN 438-2:2016 Par. 17 | Cumulative dimensional change | ≤ 0,4 ≤ 0,3 | 2,0 ≤ t < 5,0 t ≥ 5,0 | Longitudinal % ⁽²⁾ |
| | | | ≤ 0,8 ≤ 0,6 | 2,0 ≤ t < 5,0 t ≥ 5,0 | Transversal % ⁽²⁾ |
| Resistance to impact by large diameter ball | EN 438-2:2016 Par. 21 | Drop height Indent diameter | ≥ 1400 ≥ 1800 ≤ 10 | 2,0 ≤ t < 6,0 t ≥ 6,0 | mm |
| Resistance to crazing | EN 438-2:2016 Par. 24 | Appearance | ≥ 4 | | Rating |
| Density | EN ISO 1183 | Density | ≥ 1,35 | | g/cm ³ |
| Flexural modulus | EN ISO 178 | Stress | ≥ 9000 | | MPa |
| Flexural strength | EN ISO 178 | Stress | ≥ 80 | | Mpa |
| SURFACE PROPERTIES | | | | | |
| Resistance to surface wear | EN 438-2:2016 Par. 10 | Initial point | ≥ 50 | | Revolutions |
| Resistance to water vapour | EN 438-2:2016 Par. 14 | Appearance | ≥ 3 ≥ 4 | gloss finish other finishes | Rating |
| Resistance to dry heat (160°C) | EN 438-2:2016 Par. 16 | Appearance | ≥ 3 ≥ 4 | gloss finish other finishes | Rating |
| Resistance to wet heat (100°C) | EN 438-2:2016 Par. 18 | Appearance | ≥ 3 ≥ 4 | gloss finish other finishes | Rating |
| Resistance to scratching | EN 438-2:2016 Par. 25 | Force | ≥ 2 ≥ 3 | for smooth finishes for textured finishes | Rating |
| Resistance to staining | EN 438-2:2016 Par. 26 | Appearance | 5 ≥ 4 | groups 1 & 2 group 3 | Rating |
| Light Fastness (Xenon-arc) | EN 438-2:2016 Par. 27 | Contrast | ≥ 4 | | Grey scale rating |

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| FIRE PERFORMANCES | | | | |
|---------------------------------------|-------------------------|---|------------------------------|--------------------|
| Reaction to fire ⁽³⁾ | EN 13501 | Classification - CGS wood frame Classification - CGF metal frame | D-s2,d0 B-s1,d0 | class |
| FOOD & HYGIENE PROPERTIES | | | | |
| Contact with food - overall migration | EN 1186 | Acetic acid 3 % Ethanol 50 % Ethanol 95 % Isooctane | ≤ 10 ≤ 10 ≤ 10 ≤ 10 | mg/dm ² |
| ENVIRONMENTAL PROPERTIES | | | | |
| Formaldehyde emission | EN 13986 | Formaldehyde emission rating | E1 | Rating |
| Volatile organic chemical emission | AFNOR NF EN ISO 16000-9 | Classification | A+ | Rating |
| | | TVOC emission | ≤ 0,2 | mg/m ³ |
| Phenol Free ⁽⁴⁾ | AFNOR NF EN ISO 16000-9 | Phenol emission | < 0,002 | mg/m ³ |

Notes

- (1) t: nominal thickness [mm]
- (2) Longitudinal: parallel to the fiber direction (usually parallel to the direction of sanding). Transversal: at right angles to the fiber direction
- (3) Please contact the manufacturer for more details on the fire tests performed and the certificates held
- (4) Phenol is not used as raw material in PURICOMPACT production. 0,002 mg/m³ is the detection limit (DL) value of the test.

Note to PURICOMPACT sheets with adhesive protective film

The protective films are designed for temporary surface protection against dirt, scratches and tool marks; they are not designed for protection against corrosion, humidity or chemicals. The laminates covered with the protective film shall be stored in a clean, dry place (40 to 60 RH%) at room temperature (20 to 25 °C), avoiding weathering and UV exposure. In any case, the removal must be made within four months from the date of shipment by Puricelli. Puricelli cannot be responsible for the misuse of the laminates covered with the protective film, nor for the consequences for non-recommended applications.