



novalca

OVALUX® PC FR F

**PC compound,
flame retardant grade**

FR: flame retardant grade, flammability class V0 at 1.5 mm, GWFI 960°C.

F: improved melt index grade.

Color: available in opaque colors only - for injection molding.

| RECOMMENDED PROCESSING PARAMETERS FOR INJECTION MOLDING | | | |
|---|--------------------|---|-------------------|
| DRYING CONDITIONS | BARREL TEMPERATURE | | MOULD TEMPERATURE |
| 90 ÷ 100 °C x 3 ÷ 4 hours Recommended moisture level after drying ≤0.02% | | 270 ÷ 300 °C Standard melt temperature: 290 °C | 80 ÷ 100 °C |
| PACKAGING | | | |
| 25 Kg Bags, 1000 Kg Octabins, 750 Kg Boxes | | | |

| PROPERTIES | METHOD | | UNIT | TYPICAL VALUES |
|--|-----------------|----------------|--------------------|----------------|
| PHYSICAL | | | | |
| Density | ASTM D792 | ISO 1183 | gr/cm ³ | 1.20 |
| Humidity Absorption – (Equilibrium value, in air, 23°C, 50% RH) | INTERNAL METHOD | | % | 0.12 |
| Mould Shrinkage | INTERNAL METHOD | | % | 0.5 ÷ 0.8 |
| Melt Flow Index MFI (300 °C -1.2 Kg) | ASTM D1238 | ISO 1133 | g/10' | 18 |
| MECHANICAL | | | | |
| Tensile strength: stress at yield | ASTM D638 | ISO 527-1,-2 | MPa | 60 |
| strain at break | ASTM D638 | ISO 527-1,-2 | % | ≥ 50 |
| Flexural modulus | ASTM D790 | ISO 178 | MPa | 2400 |
| IZOD notched impact strength, at 23 °C Specimen dimensions 62.5 mm x 12.7 mm x 3.2 mm | ASTM D256 | - | J/m | 500 |
| THERMAL | | | | |
| VICAT softening temperature at 49 N-120 °C/h | ASTM D1525/B | ISO 306/B | °C | 142 |
| Ball pressure test at 125±2 °C | BS 3456 | IEC 60695-10-2 | °C | Passed |
| ELECTRICAL | | | | |
| Surface resistivity | ASTM D257 | IEC 60093 | Ohm | 1E16 |
| Dielectric strength | ASTM D149 | IEC 60243-1 | kV/mm | 34 |
| Dielectric constant at 10 ⁶ Hz | ASTM D150 | IEC 60250 | - | 3.0 |
| Dissipation factor -10 ⁶ Hz | ASTM D150 | IEC 60250 | - | 0.009 |
| Comparative tracking index (solution A, CTI) | VDE 0303-P1 | IEC 60112 | V | 225 |
| FLAMMABILITY | | | | |
| Flammability UL94 (thickness 3.2 mm) | UL 94 | Class | V0 | |
| Flammability UL94 (thickness 1.5 mm) | UL94 | Class | V0 | |
| Glow wire flammability GWFI (thickness 3.2 mm) | IEC 60695-2-12 | °C | 960 | |
| Glow wire flammability GWFI (thickness 2 mm) | IEC 60695-2-12 | °C | 960 | |
| Burning rate FMVSS302 (thickness 2.2/ 3.2 mm) | ISO 3795 | mm/min | passed | |

Our technical data are provided for guidance purpose only for natural color compound and are based on average values. The data are not meant to be used for specification or warranted purposes. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the data have been established on standardized test specimens at room temperature. All technical information is subject to continuous update, so the customer shall always ensure that the latest release of technical information is at his own disposal. It is the customer's responsibility to inspect and test our products in order to determine to his own satisfaction whether they are suitable for his intended uses and applications or used in conjunction with third-party materials. Unless specifically stated with reference to the specific color code, the products mentioned herein are not suitable for applications in the pharmaceutical, medical, dental and toys sectors, in contact with foodstuff or for potable water transportation.

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