

Technical Data Sheet



ALCOM LDDC PC 1000 UV BK1104-20

| | |
|------------------------|---|
| Base Polymer | Polycarbonate |
| Filler/Additive System | special filler,UV stabilised |
| Market Segment | Automotive,Lighting |
| Application Area | light transparent components,Black Panel-Technology |
| Typical Applications | display elements,operating elements |
| Approvals | Stellantis Plastic Material Policy |

| | |
|-------------------------------|--|
| Pre-Drying Conditions | 120 °C in a dry air (dessiccant) dryer for 2-4 h 120 °C in an air circulating dryer for 4-12 h max. moisture content <0,02 % |
| Processing Injection Moulding | melt temperature 270-310 °C mould temperature 80-110 °C |
| Storage | dry, protected from light |

| Properties | Value | Dimension | Test Norm |
|---|-----------|------------------------|-------------|
| Mechanical Properties | | | |
| Flexural Modulus | 2450 | MPa | ISO 178 |
| Flexural Stress (3.5% Strain) | 76 | MPa | ISO 178 |
| Tensile Modulus | 2400 | MPa | ISO 527 |
| Tensile Stress at Yield | 66 | MPa | ISO 527 |
| Tensile Elongation at Yield | 6 | % | ISO 527 |
| Tensile Elongation at Break | 80 | % | ISO 527 |
| Impact Strength (Charpy, 23°C) | no break | kJ/m ² | ISO 179/1eU |
| Impact Strength (Charpy, -40°C) | no break | kJ/m ² | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C) | 10 | kJ/m ² | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 10 | kJ/m ² | ISO 179/1eA |
| Thermal Properties | | | |
| Vicat B50 | 142 | °C | ISO 306 |
| HDT / A (1,8 MPa) | 124 | °C | ISO 75-1/-2 |
| Rheological Properties | | | |
| Melt Index (MVR) | 20 | cm ³ /10min | ISO 1133 |
| MVR temperature | 300 | °C | - |
| MVR load | 1.2 | kg | - |
| Shrinkage (24h) | 0.6 - 0.9 | % | ISO 294-4 |
| Physical Properties | | | |
| Density | 1190 | kg/m ³ | ISO 1183 |

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Optical Properties

| | | | |
|--|------|---|-----------|
| Total Transmission T(Y) (d=1,0mm, A, 2°) | 49 | % | ISO 13468 |
| Total Transmission T(Y) (d=2,0mm, A, 2°) | 27 | % | ISO 13468 |
| Total Transmission T(Y) (d=3,0mm, A, 2°) | 15 | % | ISO 13468 |
| Total Transmission T(Y) (d=4,0mm, A, 2°) | 8.5 | % | ISO 13468 |
| Haze T(Y) (d=1,0 mm, A, 2°) | 5 | % | ISO 13468 |
| Haze T(Y) (d=2,0 mm, A, 2°) | 8 | % | ISO 13468 |
| Haze T(Y) (d=3,0 mm, A, 2°) | 10 | % | ISO 13468 |
| Haze T(Y) (d=4,0 mm, A, 2°) | 13.5 | % | ISO 13468 |

Diagrams

Stress-Strain

