

**ALCOM LD2 HTC 1000 18160 CC1198-18**

(Last update: 01.02.2024)

**MOCOM**

|                  |                                                                                          |
|------------------|------------------------------------------------------------------------------------------|
| Base Polymer     | High Temperature Copolyester                                                             |
| Special Features | high toughness, high light transmission, processing stabilised, injection moulding grade |
| Market Segment   | Lighting                                                                                 |
| Application Area | lamp covers                                                                              |

|                               |                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 90 °C in a dry air (dessiccant) dryer<br>for 4-6 h<br>max. moisture content <0,03 % |
| Processing Injection Moulding | melt temperature 260-280 °C<br>mould temperature 50-70 °C                           |
| Storage                       | dry, protected from light                                                           |

| Properties                              | Value     | Dimension              | Test Norm   |
|-----------------------------------------|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>            |           |                        |             |
| Flexural Modulus                        | 1600      | MPa                    | ISO 178     |
| Flexural Stress (3.5% Strain)           | 51        | MPa                    | ISO 178     |
| Tensile Modulus                         | 1600      | MPa                    | ISO 527     |
| Tensile Stress at Yield                 | 45        | MPa                    | ISO 527     |
| Tensile Elongation at Yield             | 6.2       | %                      | ISO 527     |
| Tensile Elongation at Break             | 125       | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | no break  | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | no break  | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 95        | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 9         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                        |             |
| Vicat B50                               | 108       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                       | 84        | °C                     | ISO 75-1/-2 |
| <b>Rheological Properties</b>           |           |                        |             |
| Melt Index (MVR)                        | 15        | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 280       | °C                     | -           |
| MVR load                                | 2.16      | kg                     | -           |
| Shrinkage (24h)                         | 0.4 - 0.7 | %                      | ISO 294-4   |
| <b>Physical Properties</b>              |           |                        |             |
| Density                                 | 1180      | kg/m <sup>3</sup>      | ISO 1183    |
| <b>Flammability</b>                     |           |                        |             |
| Flammability (1.5 mm)                   | HB        | class                  | UL 94       |



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|                                 |        |   |              |
|---------------------------------|--------|---|--------------|
| Glow Wire (GWFI, 850 °C, 1.0mm) | passed | - | DIN EN 60695 |
|---------------------------------|--------|---|--------------|

### Optical Properties

|                                          |      |   |           |
|------------------------------------------|------|---|-----------|
| Total Transmission T(Y) (d=1,0mm, A, 2°) | 90   | % | ISO 13468 |
| Total Transmission T(Y) (d=2,0mm, A, 2°) | 89   | % | ISO 13468 |
| Total Transmission T(Y) (d=3,0mm, A, 2°) | 87.5 | % | ISO 13468 |
| Total Transmission T(Y) (d=4,0mm, A, 2°) | 86   | % | ISO 13468 |
| Haze T(Y) (d=1,0 mm, A, 2°)              | 16   | % | ISO 13468 |
| Haze T(Y) (d=2,0 mm, A, 2°)              | 26.5 | % | ISO 13468 |
| Haze T(Y) (d=3,0 mm, A, 2°)              | 38   | % | ISO 13468 |
| Haze T(Y) (d=4,0 mm, A, 2°)              | 46.5 | % | ISO 13468 |
| Half Power Angle T(Y) (d=1,0mm, A, 2°)   | 1    | ° | -         |
| Half Power Angle T(Y) (d=2,0mm, A, 2°)   | 1    | ° | -         |
| Half Power Angle T(Y) (d=3,0mm, A, 2°)   | 1    | ° | -         |
| Half Power Angle T(Y) (d=4,0mm, A, 2°)   | 1    | ° | -         |

### Liability Exclusion

These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions.

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