

## Technical Data Sheet



### ALCOM LG PC 1000 UV 14094 CC1323-08

## MOCOM

|                        |                                                                     |
|------------------------|---------------------------------------------------------------------|
| Base Polymer           | Polycarbonate                                                       |
| Filler/Additive System | special filler, antioxidant                                         |
| Special Features       | high light transmission, light scattering, UV stabilised, easy flow |
| Market Segment         | Automotive, Lighting                                                |
| Application Area       | lighting, light transparent components                              |
| Typical Applications   | lamp covers, light guides                                           |
| Approvals              | GS93016, AMECA (SAE J-576)                                          |

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 120 °C in a dry air (dessiccant) dryer<br>for 2-3 h<br>max. moisture content <0,02 % |
| Processing Injection Moulding | melt temperature 270-300 °C<br>mould temperature 80-100 °C                           |
| Storage                       | dry, protected from light                                                            |

| Properties                               | Value     | Dimension              | Test Norm   |
|------------------------------------------|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>             |           |                        |             |
| Flexural Modulus                         | 2500      | MPa                    | ISO 178     |
| Flexural Stress (3.5% Strain)            | 78        | MPa                    | ISO 178     |
| Tensile Modulus                          | 2350      | MPa                    | ISO 527     |
| Tensile Stress at Yield                  | 65        | MPa                    | ISO 527     |
| Tensile Elongation at Yield              | 6         | %                      | ISO 527     |
| Tensile Elongation at Break              | 15        | %                      | ISO 527     |
| Impact Strength (Charpy, 23 °C)          | 90        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40 °C)         | 75        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23 °C)  | 5         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40 °C) | 5         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>                |           |                        |             |
| Vicat B50                                | 141       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                        | 125       | °C                     | ISO 75-1/-2 |
| <b>Rheological Properties</b>            |           |                        |             |
| Melt Index (MVR)                         | 28        | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                          | 300       | °C                     | -           |
| MVR load                                 | 1.2       | kg                     | -           |
| Shrinkage (24h)                          | 0.6 - 0.9 | %                      | ISO 294-4   |
| <b>Physical Properties</b>               |           |                        |             |
| Density                                  | 1180      | kg/m <sup>3</sup>      | ISO 1183    |

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#### Flammability

Flammability (0.75 mm)

Yellow Card available

Flammability (1.5 mm)

Yellow Card available

Glow Wire (GWFI, 850 °C, 2.0mm)

V-2

class

UL 94

yes

-

-

HB

class

UL 94

yes

-

-

passed

-

DIN EN 60695

#### Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)

88.5

%

ISO 13468

Total Transmission T(Y) (d=2,0mm, A, 2°)

85.5

%

ISO 13468

Total Transmission T(Y) (d=3,0mm, A, 2°)

81.5

%

ISO 13468

Total Transmission T(Y) (d=4,0mm, A, 2°)

76

%

ISO 13468

Haze T(Y) (d=1,0 mm, A, 2°)

93.5

%

ISO 13468

Haze T(Y) (d=2,0 mm, A, 2°)

95

%

ISO 13468

Haze T(Y) (d=3,0 mm, A, 2°)

95

%

ISO 13468

Haze T(Y) (d=4,0 mm, A, 2°)

95

%

ISO 13468

Half Power Angle T(Y) (d=1,0mm, A, 2°)

12

°

-

Half Power Angle T(Y) (d=2,0mm, A, 2°)

20

°

-

Half Power Angle T(Y) (d=3,0mm, A, 2°)

24

°

-

Half Power Angle T(Y) (d=4,0mm, A, 2°)

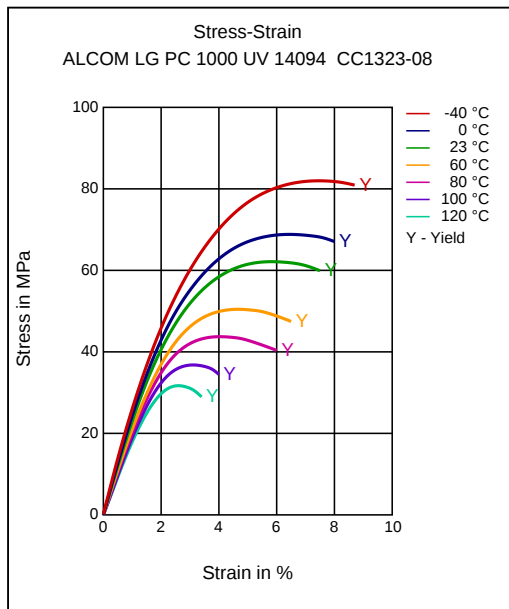
28

°

-

#### Diagrams

##### Stress-Strain



##### Spectrum

