

## Technical Data Sheet



### ALCOM AWL 15/1 UV WT1471-04LB

|                        |   |
|------------------------|---|
| Base Polymer           | Acrylonitrile/Butadiene/Styrene/Copolymer |
| Filler/Additive System | 15 % special filler                       |
| Special Features       | highly reflective,opaque,UV stabilised    |
| Market Segment         | Automotive,Lighting                       |
| Application Area       | lighting,light blocking components        |
| Typical Applications   | light guides,reflectors                   |

|                               |   |
|-------------------------------|---|
| Pre-Drying Conditions         | 80 °C in a dry air (dessiccant) dryer<br>for 2-4 h<br>80 °C in an air circulating dryer<br>for 4-8 h<br>max. moisture content <0,02 % |
| Processing Injection Moulding | melt temperature 220-260 °C<br>mould temperature 50-80 °C   |
| Storage                       | dry, protected from light   |

| Properties                             | Value     | Dimension              | Test Norm   |
|--|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>           |           |                        |             |
| Flexural Modulus                       | 2800      | MPa                    | ISO 178     |
| Flexural Strength                      | 75        | MPa                    | ISO 178     |
| Tensile Modulus                        | 2700      | MPa                    | ISO 527     |
| Tensile Stress at Yield                | 45        | MPa                    | ISO 527     |
| Tensile Elongation at Yield            | 2.6       | %                      | ISO 527     |
| Tensile Elongation at Break            | 13        | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)         | 50        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C) | 7.5       | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Ball Indentation Hardness H358/30      | 105       | MPa                    | ISO 2039-1  |
| <b>Thermal Properties</b>              |           |                        |             |
| Vicat B50                              | 106       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                      | 93        | °C                     | ISO 75-1/-2 |
| <b>Rheological Properties</b>          |           |                        |             |
| Melt Index (MVR)                       | 8.5       | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                        | 220       | °C                     | -           |
| MVR load                               | 10        | kg                     | -           |
| Shrinkage (24h)                        | 0.5 - 0.8 | %                      | ISO 294-4   |
| <b>Physical Properties</b>             |           |                        |             |
| Density                                | 1170      | kg/m <sup>3</sup>      | ISO 1183    |

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#### Flammability

|                       |    |       |       |
|-----------------------|----|-------|-------|
| Flammability (1.5 mm) | HB | class | UL 94 |
| Flammability (3.0 mm) | HB | class | UL 94 |

#### Optical Properties

|   |     |   |           |
|---|-----|---|-----------|
| Tristimulus Value Y10 of Reflection (d=2,0mm) | 92  | % | DIN 5033  |
| Tristimulus Value Y10 of Transm.,d=0.5mm      | 0.4 | % | ISO 13468 |