

## Makrolon® Ai2417

### PC

Covestro Deutschland AG

- MVR (300 °C/1.2 kg) 19 cm³/10 min
- UV stabilized
- easy release
- Automotive interior
- developed for high-gloss surfaces with highest requirements

| Rheological properties      | Value | Unit      | Test Standard   |
|-----------------------------|-------|-----------|-----------------|
| <b>ISO Data</b>             |       |           |                 |
| Melt volume-flow rate, MVR  | 19    | cm³/10min | ISO 1133        |
| Temperature                 | 300   | °C        | -               |
| Load                        | 1.2   | kg        | -               |
| Molding shrinkage, parallel | 0.7   | %         | ISO 294-4, 2577 |
| Molding shrinkage, normal   | 0.7   | %         | ISO 294-4, 2577 |

| Mechanical Properties                 | Value    | Unit  | Test Standard |
|---------------------------------------|----------|-------|---------------|
| <b>ISO Data</b>                       |          |       |               |
| Tensile Modulus                       | 2400     | MPa   | ISO 527       |
| Yield stress                          | 64       | MPa   | ISO 527       |
| Yield strain                          | 6        | %     | ISO 527       |
| Nominal strain at break               | >50      | %     | ISO 527       |
| Impact Strength (Charpy), +23 °C      | no break | kJ/m² | ISO 179/1eU   |
| Flexural Modulus (23 °C)              | 2350     | MPa   | ISO 178       |
| Flexural strength                     | 98       | MPa   | ISO 178       |
| Notched Impact Strength (Izod), 23 °C | 60       | kJ/m² | ISO 180/1A    |
| Notched Impact Strength (Izod)        | 15       | kJ/m² | ISO 180/1A    |
| Temperature                           | -30      | °C    | -             |

| Thermal Properties                          | Value | Unit  | Test Standard  |
|---------------------------------------------|-------|-------|----------------|
| <b>ISO Data</b>                             |       |       |                |
| Temp. of deflection under load (1.80 MPa)   | 124   | °C    | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)   | 136   | °C    | ISO 75-1/-2    |
| Vicat softening temperature, 50 °C/h 50N    | 141   | °C    | ISO 306        |
| Coeff. of Linear Therm. Expansion, parallel | 65    | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal   | 65    | E-6/K | ISO 11359-1/-2 |

| Other Properties | Value | Unit  | Test Standard |
|------------------|-------|-------|---------------|
| <b>ISO Data</b>  |       |       |               |
| Density          | 1200  | kg/m³ | ISO 1183      |

| Test specimen production              | Value | Unit | Test Standard |
|---------------------------------------|-------|------|---------------|
| <b>ISO Data</b>                       |       |      |               |
| Injection Molding, melt temperature   | 280   | °C   | ISO 294       |
| Injection Molding, mold temperature   | 80    | °C   | ISO 294       |
| Injection Molding, injection velocity | 200   | mm/s | ISO 294       |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---------------------------------------------|-----------|------|---------------|
| Pre-drying - Temperature                    | 120       | °C   | -             |
| Pre-drying - Time                           | 2 - 3     | h    | -             |
| Processing humidity                         | ≤0.02     | %    | -             |
| Melt temperature                            | 280 - 320 | °C   | -             |
| Mold temperature                            | 80 - 120  | °C   | -             |
| Zone 1                                      | 250 - 260 | °C   | -             |
| Zone 2                                      | 270 - 280 | °C   | -             |
| Zone 3                                      | 280 - 290 | °C   | -             |
| Nozzle temperature                          | 290 - 300 | °C   | -             |
| Back pressure                               | 5 - 15    | MPa  | -             |

## Characteristics

**Processing**

Injection Molding

**Features**

High Gloss

**Additives**

Release agent

**Applications**

Automotive

**Special Characteristics**

UV stabilized, Transparent

**Disclaimer**

**Liability Exclusion**

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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