

## Makrolon® 2807 RE

### PC

Covestro Deutschland AG

- MVR (300 °C/1.2 kg) 34 cm³/10 min
- low viscosity
- easy release
- Automotive interior grade with specified sensor signal transparency
- 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  | 34    | 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 |
| Melt Flow Index, MFI        | 10    | g/10min   | ISO 1133        |
| MFI temperature             | 300   | °C        | -               |
| MFI load                    | 1.2   | kg        | -               |

| Mechanical Properties                 | Value    | Unit  | Test Standard |
|---------------------------------------|----------|-------|---------------|
| <b>ISO Data</b>                       |          |       |               |
| Tensile Modulus                       | 2350     | MPa   | ISO 527       |
| Yield stress                          | 63       | 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)              | 2400     | MPa   | ISO 178       |
| Flexural strength                     | 98       | MPa   | ISO 178       |
| Notched Impact Strength (Izod), 23 °C | 70       | kJ/m² | ISO 180/1A    |
| Notched Impact Strength (Izod)        | 15       | kJ/m² | ISO 180/1A    |
| Temperature                           | -30      | °C    | -             |
| Ball Indentation Hardness             | 115      | MPa   | ISO 2039-1    |

| Thermal Properties                          | Value | Unit  | Test Standard  |
|---------------------------------------------|-------|-------|----------------|
| <b>ISO Data</b>                             |       |       |                |
| Temp. of deflection under load (1.80 MPa)   | 125   | °C    | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)   | 138   | °C    | ISO 75-1/-2    |
| Vicat softening temperature, 50 °C/h 50N    | 145   | °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 |
| Glow Wire (GWFI, Flammability Index)        | 850   | °C    | IEC 60695-2-12 |
| GWFI - thickness tested (1)                 | 0.75  | mm    | -              |
| Glow Wire (GWFI, Flammability Index)        | 850   | °C    | IEC 60695-2-12 |
| GWFI - thickness tested (2)                 | 1.5   | mm    | -              |
| Glow Wire (GWFI, Flammability Index)        | 930   | °C    | IEC 60695-2-12 |
| GWFI - thickness tested (3)                 | 3     | mm    | -              |
| Glow Wire Ignition Temperature              | 875   | °C    | IEC 60695-2-13 |
| GWIT - thickness tested (1)                 | 0.75  | mm    | -              |
| Glow Wire Ignition Temperature              | 875   | °C    | IEC 60695-2-13 |
| GWIT - thickness tested (2)                 | 1.5   | mm    | -              |
| Glow Wire Ignition Temperature              | 875   | °C    | IEC 60695-2-13 |
| GWIT - thickness tested (3)                 | 3     | mm    | -              |

| Other Properties | Value | Unit  | Test Standard |
|------------------|-------|-------|---------------|
| <b>ISO Data</b>  |       |       |               |
| Density          | 1190  | kg/m³ | ISO 1183      |
| Bulk density     | 660   | kg/m³ | -             |

| 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

### Special Characteristics

UV stabilized, Transparent, Opaque, Translucent

### Delivery form

Pellets

### Certifications

Contains renewable resources, ISCC Plus

### Additives

Release agent

### Applications

General Purpose

## 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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