



## Makrolon® FP3087

PC

Covestro Deutschland AG

- MVR (300 °C/1.2 kg) 7.0 cm³/10 min
- high viscosity

| Rheological properties     | Value | Unit      | Test Standard |
|----------------------------|-------|-----------|---------------|
| <b>ISO Data</b>            |       |           |               |
| Melt volume-flow rate, MVR | 7     | cm³/10min | ISO 1133      |
| Temperature                | 300   | °C        | -             |
| Load                       | 1.2   | kg        | -             |

| Mechanical Properties                | Value | Unit  | Test Standard |
|--------------------------------------|-------|-------|---------------|
| <b>ISO Data</b>                      |       |       |               |
| Tensile Modulus                      | 2350  | MPa   | ISO 527       |
| Yield stress                         | 66    | MPa   | ISO 527       |
| Yield strain                         | 6     | %     | ISO 527       |
| Puncture - maximum force, +23°C      | 5700  | N     | ISO 6603-2    |
| Puncture - maximum force, -30°C      | 6500  | N     | ISO 6603-2    |
| Puncture energy, +23°C               | 62    | J     | ISO 6603-2    |
| Puncture energy, -30°C               | 67    | J     | ISO 6603-2    |
| Notched Impact Strength (Izod), 23°C | 75    | kJ/m² | ISO 180/1A    |
| Notched Impact Strength (Izod)       | 14    | kJ/m² | ISO 180/1A    |
| Temperature                          | -20   | °C    | -             |

| Thermal Properties                        | Value | Unit | Test Standard |
|-------------------------------------------|-------|------|---------------|
| <b>ISO Data</b>                           |       |      |               |
| Temp. of deflection under load (1.80 MPa) | 122   | °C   | ISO 75-1/-2   |
| Vicat softening temperature, 50°C/h 50N   | 142   | °C   | ISO 306       |

| Test specimen production              | Value | Unit | Test Standard |
|---------------------------------------|-------|------|---------------|
| <b>ISO Data</b>                       |       |      |               |
| Injection Molding, melt temperature   | 300   | °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