



# Makrolon® M204 LF

/ MVR (300 °C/1.2 kg) 35 cm³/10 min; low viscosity; improved friction characteristics; biocompatible according to many ISO 10993-1 test requirements; available in opaque colors only; suitable for medical devices

ISO Shortname PC

| Property | Test Condition | Unit | Standard | typical Value |
|----------|----------------|------|----------|---------------|
|----------|----------------|------|----------|---------------|

## Rheological properties

|                                    |                                                   |            |               |           |
|------------------------------------|---------------------------------------------------|------------|---------------|-----------|
| Melt volume-flow rate              | 300 °C/ 1.2 kg                                    | cm³/10 min | ISO 1133      | 35        |
| Molding shrinkage, parallel/normal | Value range based on general practical experience | %          | b.o. ISO 2577 | 0.5 - 0.7 |

## Mechanical properties (23 °C/50 % r. h.)

|                              |              |       |                              |      |
|------------------------------|--------------|-------|------------------------------|------|
| C Tensile modulus            | 1 mm/min     | MPa   | ISO 527-1,-2                 | 2350 |
| C Yield stress               | 50 mm/min    | MPa   | ISO 527-1,-2                 | 62   |
| C Yield strain               | 50 mm/min    | %     | ISO 527-1,-2                 | 5.8  |
| C Nominal strain at break    | 50 mm/min    | %     | ISO 527-1,-2                 | >50  |
| Flexural modulus             | 2 mm/min     | MPa   | ISO 178                      | 2350 |
| Flexural strength            | 2 mm/min     | MPa   | ISO 178                      | 94   |
| Izod notched impact strength | 23 °C/ 3 mm  | kJ/m² | ISO 21305/based on ISO 180/A | 50 P |
| Izod notched impact strength | -30 °C/ 3 mm | kJ/m² | ISO 21305/based on ISO 180/A | 12 C |
| Izod impact strength         | 23 °C        | kJ/m² | ISO 180/U                    | N    |
| Izod impact strength         | -30 °C       | kJ/m² | ISO 180/U                    | N    |

## Thermal properties

|                                                     |                |                     |                |                     |
|-----------------------------------------------------|----------------|---------------------|----------------|---------------------|
| C Temperature of deflection under load              | 1.80 MPa       | °C                  | ISO 75-1,-2    | 121                 |
| C Temperature of deflection under load              | 0.45 MPa       | °C                  | ISO 75-1,-2    | 135                 |
| Vicat softening temperature                         | 50 N; 120 °C/h | °C                  | ISO 306        | 142                 |
| C Coefficient of linear thermal expansion, parallel | 23 to 55 °C    | 10 <sup>-4</sup> /K | ISO 11359-1,-2 | 0.65                |
| C Coefficient of linear thermal expansion, normal   | 23 to 55 °C    | 10 <sup>-4</sup> /K | ISO 11359-1,-2 | 0.65                |
| C Burning behavior UL 94 (1.5 mm)                   |                | Class               | UL 94          | V-2 (Covestro Test) |

## Other properties (23 °C)

|                                        |                   |       |            |      |
|----------------------------------------|-------------------|-------|------------|------|
| C Water absorption (saturation value)  | Water at 23 °C    | %     | ISO 62     | 0.33 |
| C Water absorption (equilibrium value) | 23 °C; 50 % r. h. | %     | ISO 62     | 0.11 |
| C Density                              |                   | kg/m³ | ISO 1183-1 | 1190 |

## Recommended processing and drying conditions

|                            |  |    |   |               |
|----------------------------|--|----|---|---------------|
| Dry Air Drying Temperature |  | °C | - | 120           |
| Dry Air Drying Time        |  | h  | - | 4             |
| Moisture Content max. (%)  |  | %  | - | <=0.02        |
| Vent Depth                 |  | mm | - | 0.025 - 0.075 |

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.  
Impact properties: N = non-break, P = partial break, C = complete break

