**Technical Data Sheet**

# *Diamond Pc* 1212 FR0 Black 1819

Polycarbonate
LyondellBasell Industries
Engineering Plastics

| General | |
|---|---|
| Additive | • Flame Retardant |
| Features | • Flame Retardant |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.21 | 1.21 g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) [1] (300°c/1.2 Kg) | 12 g/10 min | 12 g/10 min | ASTM D1238 |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Strength | | | ASTM D638 |
| Yield, Injection Molded [2] | 9000 psi | 62.1 MPa | |
| Break, Injection Molded | 8300 psi | 57.2 MPa | |
| Flexural Modulus [3] | 310000 psi | 2140 MPa | ASTM D790B |
| Flexural Strength [3] (Yield) | 13100 psi | 90.3 MPa | ASTM D790B |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Notched Izod Impact (0.125 In (3.18 Mm)) | 12 ft·lb/in | 640 J/m | ASTM D256A |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 Psi (0.45 Mpa), Unannealed, 0.125 In (3.18 Mm) | 279 °F | 137 °C | |
| 264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm) | 270 °F | 132 °C | |
| **Flammability** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Flame Rating | | | UL 94 |
| 0.06 In (1.5 Mm) | V-0 | V-0 | |
| 0.10 In (2.5 Mm) | 5VA | 5VA | |

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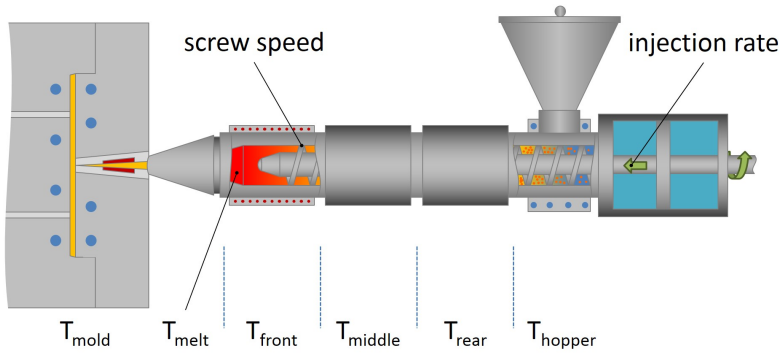


| Injection | Nominal Value (English) | Nominal Value (SI) |
|---|---|---|
| Drying Temperature - Desiccant Dryer | 220 to 240 °F | 104 to 116 °C |
| Drying Time - Desiccant Dryer | 2.0 to 4.0 hr | 2.0 to 4.0 hr |
| Suggested Max Moisture | 0.02 % | 0.02 % |
| Hopper Temperature | 480 to 540 °F | 249 to 282 °C |
| Rear Temperature | 500 to 560 °F | 260 to 293 °C |
| Middle Temperature | 500 to 560 °F | 260 to 293 °C |
| Front Temperature | 500 to 560 °F | 260 to 293 °C |
| Nozzle Temperature | 500 to 560 °F | 260 to 293 °C |
| Mold Temperature | 160 to 220 °F | 71 to 104 °C |
| Injection Pressure | 12000 to 15000 psi | 82.7 to 103 MPa |

**Notes**

[1] Procedure A

[2] 2.0 in/min (51 mm/min)

[3] Method I (3 point load), 0.050 in/min (1.3 mm/min)

**Notes**

These are typical property values not to be construed as specification limits.