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TECHNICAL DATA SHEET

# TECHNYL C 206F NC

TECHNYL C 206F NC is an unreinforced polyamide PA6, standard for fast injection cycles, for injection moulding. This grade has high fluidity and a good mould release.

## General

| | | |
|---|---|---|
| Feature | Fast molding cycle | |
| Polymer type | PA6 (Polyamide 6) | |
| Processing technology | Injection molding | |
| Certification | RoHS<br>EC 1907/2006 (REACH) | UL-Yellow Card |
| Applications | Fasteners<br>Aerosol valve | Fittings |
| Colors available | Natural | |
| Forms | Pellets | |

## Product identification

| | |
|---|---|
| ISO 1043 abbreviation | PA6 |

| | Condition | Standard | Unit | Value |
|---|---|---|---|---|
| **Physical properties** | | | | |
| Density | | ISO 1183 | g/cm³ | 1.14 |
| Water absorption | 24 hr, 23°C | ISO 62 | % | 1.6 |
| Molding shrinkage, parallel | | ISO 294-4, 2577 | % | 1.1 |
| Molding shrinkage, normal | | ISO 294-4, 2577 | % | 1.2 |

| **Mechanical properties** | | | | **dam / cond.*** |
|---|---|---|---|---|
| Tensile modulus | 1 mm/min | ISO 527-1/-2 | MPa | 3000 / 1100 |
| Stress at break | | ISO 527-1/-2 | MPa | 50 / 60 |
| Strain at break | | ISO 527-1/-2 | % | 15 / 200 |
| Flexural modulus, ISO 178 | 2 mm/min | ISO 178 | MPa | 2800 / 1000 |
| Flexural strength, ISO 178 | 2 mm/min | ISO 178 | MPa | 100 / 40 |
| Charpy notched impact strength, +23°C | +23°C | ISO 179/1eA | kJ/m² | 4 / 15 |
| Charpy notched impact strength, -30°C | -30°C | ISO 179/1eA | kJ/m² | 4 / - |
| Izod notched impact strength, +23°C | +23°C | ISO 180/1A | kJ/m² | 5 / 80 |

| | Condition | Standard | Unit | Value |
|---|---|---|---|---|

## Thermal properties

| | | | | |
|---|---|---|---|---|
| Melting temperature, 10°C/min | | ISO 11357-1 | °C | 222 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75 | °C | 60 |

## Electrical properties

| | | | | |
|---|---|---|---|---|
| Volume resistivity | | IEC 62631-3-1 | ohm.m | 1E+013 |
| Surface resistivity | | IEC 62631-3-1 | ohm | 1E+014 |
| Comparative tracking index | Solution A | IEC 60112 | V | 600 |
| CTI performance level category | | Sol A | | PLC 0 |

## Burning behaviour

| | | | | |
|---|---|---|---|---|
| UL Yellow Card availability | Click here to have access to the UL Yellow Card → QMFZ2.E44716 | | | |
| Flammability, 3.0 mm | 3.0 mm | UL 94 | | V2 |
| Glow-wire ignition temperature, GWIT, 0.75 mm | 0.75 mm | IEC 60695-2-13 | °C | 675 |

**: conditioned according to ISO 1110*

## Processing conditions

| | |
|---|---|
| Drying temperature/time | 80 °C |
| Suggested max moisture | 0.2 % |
| Rear temperature | 230 - 235 °C |
| Middle temperature | 235 - 240 °C |
| Front temperature | 235 - 245 °C |
| Recommended mould temperature | 60 - 80 °C |

## Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

## Injection advice

For unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

## Disclaimer

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