

TECHNICAL DATA SHEET

TECHNYL A 205F GY 2566

TECHNYL A 205F GY 2566 is an unreinforced polyamide 66 for injection moulding. This grade offers two main advantages: excellent filling qualities and UL 94 V2 under 0.8 mm. It is particularly suitable for the moulding of long parts with thin wall sections

General

|                       |                                                                                                     |                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Feature               | Fast molding cycle                                                                                  |                                                                   |
| Polymer type          | PA66 (Polyamide 66)                                                                                 |                                                                   |
| Processing technology | Injection molding                                                                                   |                                                                   |
| Certification         | RoHS<br>EC 1907/2006 (REACH)                                                                        | UL-Yellow Card                                                    |
| Applications          | Connectors<br>Electrical/Electronic Applications<br>home & office furniture<br>PC / laptop / tablet | Consumer good application<br>Fasteners<br>Industrial Applications |
| Colors available      | Grey                                                                                                |                                                                   |
| Forms                 | Pellets                                                                                             |                                                                   |

Product identification

|                       |      |
|-----------------------|------|
| ISO 1043 abbreviation | PA66 |
|-----------------------|------|

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

Physical properties

|                     |                |          |                   |      |
|---------------------|----------------|----------|-------------------|------|
| Density             |                | ISO 1183 | g/cm <sup>3</sup> | 1.14 |
| Humidity absorption | T=23°C, 50% RH | ISO 62   | %                 | 3    |

Mechanical properties

|                                       |          |              |                   | dam / cond.* |
|---------------------------------------|----------|--------------|-------------------|--------------|
| Tensile modulus                       | 1 mm/min | ISO 527-1/-2 | MPa               | 3000 / -     |
| Stress at break                       |          | ISO 527-1/-2 | MPa               | 80 / -       |
| Strain at break                       |          | ISO 527-1/-2 | %                 | 9 / -        |
| Yield stress                          |          | ISO 527-1/-2 | MPa               | 85 / -       |
| Charpy notched impact strength, +23°C | +23°C    | ISO 179/1eA  | kJ/m <sup>2</sup> | 3.5 / -      |

Thermal properties

|                                          |          |             |    |     |
|------------------------------------------|----------|-------------|----|-----|
| Melting temperature, 10°C/min            |          | ISO 11357-1 | °C | 263 |
| Temp. of deflection under load, 0.45 MPa | 0.45 MPa | ISO 75      | °C | 205 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75      | °C | 65  |

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Electrical properties

|                     |      |               |       |        |
|---------------------|------|---------------|-------|--------|
| Volume resistivity  |      | IEC 62631-3-1 | ohm.m | 1E+013 |
| Surface resistivity |      | IEC 62631-3-1 | ohm   | 5E+015 |
| Dielectric strength | 1 mm | IEC 60243-1   | kV/mm | 22     |

Burning behaviour

|                                                                                                               |                                                                                |       |  |    |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------|--|----|
| UL Yellow Card availability  | Click here to have access to the UL Yellow Card → <a href="#">QMFZ2 E44716</a> |       |  |    |
| Flammability, 0.40 mm                                                                                         | 0.40 mm                                                                        | UL 94 |  | V2 |
| Flammability, 0.75 mm                                                                                         | 0.75 mm                                                                        | UL 94 |  | V2 |
| Flammability, 1.5 mm                                                                                          | 1.5 mm                                                                         | UL 94 |  | V2 |
| Flammability, 3.0 mm                                                                                          | 3.0 mm                                                                         | UL 94 |  | V2 |

\*: conditioned according to ISO 1110

Processing conditions

|                               |              |
|-------------------------------|--------------|
| Drying temperature/time       | 80           |
| Suggested max moisture        | 0.2 %        |
| Rear temperature              | 265 - 275 °C |
| Middle temperature            | 270 - 280 °C |
| Front temperature             | 280 - 285 °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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