

TECHNYL® A 238C M20 BLACK

Product Datasheet - June 2007

Description

Polyamide 66, reinforced with mineral filler, heat stabilized, conductive, with improved impact resistance, for injection moulding.

This material combines an outstanding balance of properties: thermal resistance (high HDT), toughness, electrical conductivity, dimensional stability due to the low coefficient of thermal expansion and low moisture absorption.

Product Applications

TECHNYL® A 238C M20 BLACK is suitable for exterior automotive body panels production, in-line or online painted through the typical electrostatic painting system.

The enhanced uniformity of the material surface resistivity (1 GigaOhm) has been designed to achieve on painted components the "class "A" high quality surface aspect.

On parts like front fenders or fuel trap the material shows excellent performances on impact at both ambient and below zero temperatures.

This product is available in black.

Processing

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content of less than 0,15% with a dehumidified air drying equipment at approx 80°C.

Recommended moulding conditions :

| | | |
|-----------------------|--------------------|-------------|
| Barrel temperatures : | - feed zone | 240 - 250°C |
| | - compression zone | 250 - 260°C |
| | - front zone | 260 - 270°C |

Mould temperatures : 60 at 80°C

For more detailed information , please refer to the technical sheet "Injection moulding".

Safety

Please refer to the Safety Data Sheet

TECHNYL® A 238C M20 BLACK

The values of properties are for black grade

| Properties | Standards | Unit | Values | |
|---|------------------|-------|---------|---------|
| | | | d.a.m*. | Cond.** |
| Physical | | | | |
| Water absorption (24 h at 23°C) | ISO 62 | % | 0.61 | - |
| Density | ISO 1183-A | g/cm3 | 1.21 | - |
| Molding shrinkage Parallel (1) (RHODIA-EP) | RHODIA-EP | % | 1.70 | - |
| Molding shrinkage normal or perpendicular (1) (Rhodia EP) | RHODIA-EP | % | 1.80 | - |
| Mechanical | | | | |
| Tensile modulus | ISO 527 type 1 A | MPa | 2800 | - |
| Elongation at break | ISO 527 type 1 A | % | 16 | - |
| Tensile strength at break | ISO 527 type 1 A | MPa | 55 | - |
| Flexural modulus | ISO 178 | MPa | 2720 | - |
| Charpy notched impact strength | ISO 179/1eA | kJ/m2 | 14 | - |
| Charpy unnotched impact strength | ISO 179/1eU | kJ/m2 | 170 | - |
| Thermal | | | | |
| Melting Temperature | ISO 11357 | °C | 260 | - |
| Heat deflection temperature 0,45 Mpa | ISO 75/Bf | °C | 185 | - |
| Electrical | | | | |
| Surface resistivity | IEC 60093 | Ohm | 10E08 | - |

Identification Code : >PA66-MD20<

The information contained in this document is supplied in good faith. It is based on the extent of our knowledge of the products as listed, and on the tests and experiments carried out in our laboratories. It is to be used only as an indication and shall not be construed in any way as a format commitment or warranty of our part. Compliance of our products with your conditions or use can only be determined pursuant to your own prior appropriate list. The listed values of properties are for natural grade, if not otherwise specified.

d.a.m*.

Cond.**



CHALLENGING BOUNDARIES



Engineering Plastics