

TECHNYL® C 218 V15

Product Datasheet - November 2005

Description

Polyamide PA6, reinforced with 15 % of glass fibre, heat stabilized, for injection moulding.

Product Applications

It has good mechanical properties, it is used in all sectors of industry, offering an excellent combination between thermal and mechanical properties.

It is used in the automotive industry and electrical sectors.

This product is available in colours on request.

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 less than 0.2% with a dehumidified air drying equipment at approx. 80°C.

Recommended moulding conditions :

- Barrel temperatures :

| | |
|------------------|-------------|
| feed zone | 225 - 230°C |
| compression zone | 230 - 240°C |
| front zone | 240 - 250°C |

- Mould temperatures : 80 - 100 °C

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

Safety

Please refer to the Safety Data Sheet IFMB02JS8FS

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The values of properties are for natural grade.

| Properties | Standards | Unit | Values | |
|---------------------------------------------------------------------------|------------------|-------------------|----------|----------|
| | | | d.a.m*. | Cond.** |
| Physical | | | | |
| Water absorption (24 h at 23°C) | ISO 62 | % | 1.15 | - |
| Density | ISO 1183-A | g/cm ³ | 1.22 | - |
| Molding shrinkage Parallel (1) (RHODIA-EP) | RHODIA-EP | % | 0.55 | - |
| Molding shrinkage normal or perpendicular (1) (Rhodia EP) | RHODIA-EP | % | 1.03 | - |
| Molding Shrinkage Isotropy | RHODIA-EP | | 0.53 | - |
| Mechanical | | | | |
| Tensile modulus | ISO 527 type 1 A | MPa | 6100 | 2900 |
| Tensile strain at break | ISO 527 type 1 A | % | 4 | 7 |
| Tensile strength at break | ISO 527 type 1 A | MPa | 120 | 70 |
| Flexural modulus | ISO 178 | MPa | 6000 | 2800 |
| Charpy notched impact strength | ISO 179/1eA | kJ/m ² | 5.5 | 16 |
| Charpy unnotched impact strength | ISO 179/1eU | kJ/m ² | 42 | 58 |
| Izod notched impact strength | ISO 180/1A | kJ/m ² | 5 | 14 |
| Flamability | | | | |
| Flammability UL 94 (Thickness 0,8 mm) | ISO 1210/UL 94 | | HB | - |
| Flammability UL 94 (Thickness 1,6 mm) | ISO 1210/UL 94 | | HB | - |
| Glow wire flammability index (thickness = 1,6) | IEC 60695-2-12 | °C | 650 | - |
| Thermal | | | | |
| Melting Temperature | ISO 11357 | °C | 222 | - |
| Heat deflection temperature, 1,8 Mpa | ISO 75/Af | °C | 180 | - |
| Coef. of Linear thermal expansion normal or perpendicular (23°C to 85°C) | ISO 11359 | E-5 / °C | 4.20 | - |
| Electrical | | | | |
| Dissipation factor | IEC 60250 | | 0.02 | 0.09 |
| Volume resistivity | IEC 60093 | E14.Ohm.cm | 10 | 0.001000 |
| Surface resistivity | IEC 60093 | E14.Ohm | 0.100000 | 0.001000 |
| Dielectric strength | IEC 60243 | kV/mm | - | 22 |
| Comparative tracking index sol. A | IEC 60112 | Volt | 550 | 475 |

Identification Code : >PA6-GF15<

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* d.a.m = Dry As Moulded.

** Cond. = Conditioned according ISO 1110.



Engineering Plastics

