

## TECHNYL® A 219 V25 BLACK 21 N

Product Datasheet - June 2007

### Description

Polyamide 66, reinforced with 25% of glass fibre, for injection moulding specially stabilized to improve its resistance to oils and greases.

### Product Applications

This product is recommended for moulded parts exposed to high temperatures and in contact with oils and greases. Bearing housings are a typical example for which this formulation is suitable. TECHNYL A 219 V25 is approved by major bearing manufacturers.

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 0,2% with a dehumidified air drying equipment at approx 80°C.

Recommended moulding conditions :

Barrel temperatures :

- feed zone 260 - 270°C
- compression zone 270 - 280°C
- front zone 280 - 290°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 R734J9O28FS

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The values of properties are for black grade.

| Properties  | Standards        | Unit     | Values  |         |
|---|------------------|----------|---------|---------|
|   |                  |          | d.a.m*. | Cond.** |
| <b>Physical</b>   |                  |          |         |         |
| Water absorption (24 h at 23°C)                           | ISO 62           | %        | 0.90    | -       |
| Density   | ISO 1183-A       | g/cm3    | 1.32    | -       |
| Molding shrinkage Parallel (1) (RHODIA-EP)                | RHODIA-EP        | %        | 0.70    | -       |
| Molding shrinkage normal or perpendicular (1) (Rhodia EP) | RHODIA-EP        | %        | 0.90    | -       |
| Molding Shrinkage Isotropy                                | RHODIA-EP        |          | 0.78    | -       |
| <b>Mechanical</b>   |                  |          |         |         |
| Tensile modulus   | ISO 527 type 1 A | MPa      | 8200    | 6100    |
| Elongation at break                                       | ISO 527 type 1 A | %        | 3       | 7       |
| Tensile strength at break                                 | ISO 527 type 1 A | MPa      | 165     | 110     |
| Flexural modulus  | ISO 178          | MPa      | 7000    | 4700    |
| Charpy notched impact strength                            | ISO 179/1eA      | kJ/m2    | 9       | 11      |
| Charpy unnotched impact strength                          | ISO 179/1eU      | kJ/m2    | 40      | 80      |
| Izod notched impact strength                              | ISO 180/1A       | kJ/m2    | 8       | 11      |
| <b>Flamability</b>  |                  |          |         |         |
| Limit Oxygen index  | ISO 4589         |          | 27      | -       |
| <b>Thermal</b>  |                  |          |         |         |
| Melting Temperature                                       | ISO 11357        | °C       | 263     | -       |
| Heat deflection temperature, 1,8 Mpa                      | ISO 75/Af        | °C       | 255     | -       |
| Coef. of Linear thermal expansion parallel (23°C to 85°C) | ISO 11359        | E-5 / °C | 2.70    | -       |
| <b>Electrical</b>   |                  |          |         |         |
| Relative permittivity                                     | IEC 60250        |          | 3.5     | 5.5     |
| Dissipation factor  | IEC 60250        |          | 0.01    | 0.16    |
| Volume resistivity  | IEC 60093        | Ohm.cm   | 10E14   | 10E11   |
| Surface resistivity                                       | IEC 60093        | Ohm      | 10E13   | 10E10   |
| Dielectric strength                                       | IEC 60243        | kV/mm    | 50      | 36      |
| Comparative tracking index sol. A                         | IEC 60112        | Volt     | 550     | 525     |

## Identification Code : >PA66-GF25<

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d.a.m\*.

Cond.\*\*



CHALLENGING BOUNDARIES

Engineering Plastics