

## TECHNYL® A 218 V50 BLACK 21 N

Product Datasheet - April 2006

### Description

Polyamide PA66, reinforced with 50% of glass fibre, heat stabilized, for injection moulding.

### Product Applications

This grade is used in all sectors of industry, offering an excellent combination between thermal and mechanical properties.

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 100°C

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

### Safety

Please refer to the Safety Data Sheet AUQBM7G18FS

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The values of properties are for black colour.

| Properties  | Standards        | Unit     | Values  |         |
|---|------------------|----------|---------|---------|
|   |                  |          | d.a.m*. | Cond.** |
| <b>Physical</b>   |                  |          |         |         |
| Water absorption (24 h at 23°C)   | ISO 62           | %        | 0.60    | -       |
| Density   | ISO 1183-A       | g/cm3    | 1.57    | -       |
| Molding shrinkage Parallel (1) (RHODIA-EP)                                | RHODIA-EP        | %        | 0.39    | -       |
| Molding shrinkage normal or perpendicular (1) (Rhodia EP)                 | RHODIA-EP        | %        | 0.63    | -       |
| Molding Shrinkage Isotropy  | RHODIA-EP        |          | 0.62    | -       |
| <b>Mechanical</b>   |                  |          |         |         |
| Tensile modulus   | ISO 527 type 1 A | MPa      | 16200   | 12500   |
| Tensile strain at break   | ISO 527 type 1 A | %        | 2       | 2.5     |
| Tensile strength at break   | ISO 527 type 1 A | MPa      | 240     | 175     |
| Charpy notched impact strength  | ISO 179/1eA      | kJ/m2    | 16      | 18      |
| Charpy unnotched impact strength  | ISO 179/1eU      | kJ/m2    | 95      | 97      |
| Izod notched impact strength  | ISO 180/1A       | kJ/m2    | 15      | 18      |
| <b>Flamability</b>  |                  |          |         |         |
| Flammability UL 94 (Thickness 1,6 mm)                                     | ISO 1210/UL 94   |          | HB      | -       |
| <b>Thermal</b>  |                  |          |         |         |
| Melting Temperature   | ISO 11357        | °C       | 260     | -       |
| Heat deflection temperature, 1,8 Mpa                                      | ISO 75/Af        | °C       | 255     | -       |
| Coef. of Linear thermal expansion normal or perpendicular ( 23°C to 85°C) | ISO 11359        | E-5 / °C | 1.5     | -       |

## Identification Code : >PA66-GF50<

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 = Dry As Moulded.

\*\* Cond. = Conditioned according ISO 1110.

