

Description

Unreinforced polyamide 66, high viscosity, stabilized to improve its resistance to oils and greases, for injection moulding.

Product Applications

TECHNYL® A 319 offers good impact resistance and is recommended for moulding parts which will be exposed to high temperatures and in contact with oils and greases.

Bearing housings are a typical example for which this formulation is suitable, and approved by major bearing manufacturers.

This product is available in natural and 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 M0M98AH58FS

TECHNYL® A 319

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 | % | 1.30 | - |
| Density | ISO 1183-A | g/cm3 | 1.14 | - |
| Mechanical | | | | |
| Tensile modulus | ISO 527 type 1 A | MPa | 2900 | 1700 |
| Tensile strength at yield | ISO 527 type 1 A | MPa | 85 | 55 |
| Elongation at yield | ISO 527 type 1 A | % | 7 | 25 |
| Elongation at break | ISO 527 type 1 A | % | 35 | 300 |
| Tensile strength at break | ISO 527 type 1 A | MPa | 60 | 60 |
| Flexural modulus | ISO 178 | MPa | 2600 | 1300 |
| Flexural maximum stress | ISO 178 | MPa | 120 | 50 |
| Charpy notched impact strength | ISO 179/1eA | kJ/m2 | 6 | 15 |
| Charpy unnotched impact strength | ISO 179/1eU | kJ/m2 | NB | NB |
| Izod notched impact strength | ISO 180/1A | kJ/m2 | 6 | 15 |
| Flamability | | | | |
| Flammability UL 94 (Thickness 1,6 mm) | ISO 1210/UL 94 | | HB | - |
| Limit Oxygen index | ISO 4589 | | 26 | - |
| Thermal | | | | |
| Melting Temperature | ISO 11357 | °C | 263 | - |
| Heat deflection temperature, 1,8 Mpa | ISO 75/Af | °C | 70 | - |
| Coef. of Linear thermal expansion normal or perpendicular (23°C to 85°C) | ISO 11359 | E-5 / °C | 7 | - |
| Electrical | | | | |
| Relative permittivity | IEC 60250 | | 3.20 | 4.20 |
| Dissipation factor | IEC 60250 | | 0.02 | 0.10 |
| Volume resistivity | IEC 60093 | Ohm.cm | 20E14 | 10E12 |
| Surface resistivity | IEC 60093 | Ohm | 20E13 | 10E11 |
| Dielectric strength | IEC 60243 | kV/mm | 28 | 26 |
| Comparative tracking index sol. A | IEC 60112 | Volt | 600 | 600 |
| Comparative tracking index sol. B | IEC 60112 | Volt | 525 | - |

Identification Code : >PA66<

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d.a.m*.

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CHALLENGING BOUNDARIES

Engineering Plastics