TECAMID 66 GF 30 black

Chemical Designation: Polyamide 66
( Nylon 66 )

DIN Abbreviation: PA 66 GF 30

Colour, Filler: Black
30% glass fibres

TECAMID 66 GF 30 is a 30% glass fibre reinforced semi-crystalline engineering plastic with high strength and varied applications.

Main characteristics:
- Very strong
- Very rigid
- Resistant to many oils, greases, diesel, petrol, cleaning fluids
- Not electrically insulating
- Good dimensional accuracy
- Very abrasion resistant
- Good heat distortion resistance
- Easily machined
- Easily bonded
- UV and weather resistant

Preferred fields:
Mechanical engineering, automotive engineering, transport and conveyor technology, gears, couplings and engine construction, textile, packaging and paper processing machinery, precision engineering, electrical tools

Applications:
- Diverse machine parts
- Levers
- Thermal insulators
- Wiper blades
- Housing parts
- Distance pieces
- Friction rings
- Support rings

Ensinger Ltd
Wilfried Way
Tonyrefail
Mid Glam CF39 8JQ

Tel: 01443 678400
Fax: 01443 675777
Web: www.ensinger.ltd.uk
Email: sales@ensinger.ltd.uk
The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales. Unless otherwise stated, these values represent averages taken from injection moulding samples. We reserve the right of technical alterations.

### Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Unit</th>
<th>Test method DIN EN ISO / ASTM</th>
<th>Dry / wet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>g/cm³</td>
<td>527 / D 792</td>
<td>1.35</td>
</tr>
<tr>
<td>Tensile strength at yield</td>
<td>MPa</td>
<td>527 / D 638</td>
<td></td>
</tr>
<tr>
<td>Tensile strength at break</td>
<td>MPa</td>
<td>527 / D 638</td>
<td>160 / 140*</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>%</td>
<td>527 / D 638</td>
<td>3</td>
</tr>
<tr>
<td>Modulus of elasticity in tension</td>
<td>MPa</td>
<td>527 / D 638</td>
<td>8000 / 7500</td>
</tr>
<tr>
<td>Modulus of elasticity in flexure</td>
<td>MPa</td>
<td>178 / D 790</td>
<td></td>
</tr>
<tr>
<td>Ball indentation hardness</td>
<td>MPa</td>
<td>2039 / I</td>
<td>175</td>
</tr>
<tr>
<td>Impact strength</td>
<td>kJ/m²</td>
<td>179 / D 256</td>
<td>70</td>
</tr>
<tr>
<td>Creep rupture strength after 1000 hrs with static load</td>
<td>MPa</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Time yield limit for 1% elongation after 1000 hrs.</td>
<td>MPa</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Coefficient of friction against hardened and ground steel p ≥ 0.05 N/mm², v = 0.6 m/s</td>
<td></td>
<td>--</td>
<td>0.45 - 0.5</td>
</tr>
<tr>
<td>Wear conditions as above</td>
<td>µm/km</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crystalline melting point</td>
<td>°C</td>
<td>DIN 53 736</td>
<td>260</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>°C</td>
<td>DIN 53 736</td>
<td>72 / 5*</td>
</tr>
<tr>
<td>Heat distortion temperature Method A</td>
<td>°C</td>
<td>R 75</td>
<td>250</td>
</tr>
<tr>
<td>Heat distortion temperature Method B</td>
<td>°C</td>
<td>K 75</td>
<td>250</td>
</tr>
</tbody>
</table>

* after storage in a standard 23/50 atmosphere (DIN 50 014) to equilibrium

ENSINGER: Production and stock programme
- Semi-finished product, finished parts, injection moulded parts and profiles in more than 500 materials and modifications.
- Engineering plastics: PA extruded or cast, POM, PC, PET, PBT, PPE, PE, PP
- High temperature plastics: PI, TPI, PEEK, PPS, PES, PPSU, PEI, PSU, PVDF, PCTFE, PTFE
- Stock length: Standard 3 metres. Cast rod and sheet 2 mts. Tube up to 3.5 mts. PE, PP, PVC, and PTFE 2 mts
- Pressed/sintered semi-finished product: PI, PEEK, PPS, PTFE/PI and modifications, as well as PCTFE in special sizes ie, large discs, tubes and rings with diameters up to about 1400 mm
- Material modifications: eg. glass, carbon and aramid fibre, talc, MoS₂, graphite, PTFE, PE, silicone oil, internal lubrication