

# TECAFINE PP natural - Stock Shapes (rods, plates, tubes)

## Chemical Designation

PP (Polypropylene)

## Colour

white opaque

## Density

0.9 g/cm<sup>3</sup>

## Main features

- → excellent chemical resistance
- → excellent stiffness
- → heat stabilized
- → very good weldable

## Target Industries

- → agricultural machinery
- → chemical technology
- → food engineering

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→ pharmaceutical industry

| Mechanical properties                | parameter        | value            | unit                             | norm                 |    | comment   |
|--------------------------------------|------------------|------------------|----------------------------------|----------------------|----|---|
| Modulus of elasticity (tensile test) |                  | 1400             | MPa                              | DIN EN ISO 527-1     |    | (1) n.b. = not broken   |
| Tensile strength at yield            |                  | 32               | MPa                              | DIN EN ISO 527-1     |    |   |
| Elongation at yield (tensile test)   |                  | 8                | %                                | DIN EN ISO 527-1     |    |   |
| Impact strength (Charpy)             |                  | n.b.             | kJ/m <sup>2</sup>                | DIN EN ISO 179-1     | 1) |   |
| Ball indentation hardness            |                  | 70               | MPa                              | ISO 2039-1           |    |   |
| Shore hardness                       | Shore D          | 70               | _                                | DIN EN ISO 868       | _  |   |
| Thermal properties                   | parameter        | value            | unit                             | norm                 |    | comment   |
| Service temperature                  |                  | +0 - +100        | °C                               | -                    | 1) | <ol> <li>Found in public sources.</li> <li>Individual testing regarding<br/>application conditions is<br/>mandatory.</li> </ol>   |
| Thermal expansion (CLTE)             |                  | 16               | 10 <sup>-5</sup> K <sup>-1</sup> | DIN EN ISO 11359-1;2 |    |   |
| Electrical properties                | parameter        | value            | unit                             | norm                 |    | comment   |
| surface resistivity                  |                  | 10 <sup>14</sup> | Ω                                | DIN IEC 60093        |    |   |
| Dielectric strength                  |                  | 58               | kV/mm                            | ISO 60243-1          |    | •   |
| Other properties                     | parameter        | value            | unit                             | norm                 | _  | comment   |
| Flammability                         | corresponding to | B2               |                                  | DIN 4102             | 1) | (1) Corresponding means no listing. The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory. |

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