

POLYPROPYLENE

SPECIFICATIONS SHEET

DETAILS

Chemical Name: Polypropylene

Abbreviation: PP

Properties (Colour): Beige

Properties (Form): Rod, Sheet

Machining: Is soft to machine, however machines well.

Grades: Standard PP

Chemical Resistance: Very good resistance to acids. Does not like benzene or alcohol.

KEY BENEFITS

- Can be heat formed or bent and welded
- Resists UV and Ozone exposure better than PVC

MECHANICAL PROPERTIES

Density ρ (g/cm ³)	0.91
Tensile Strength at Yield s (MPa)	35
Elongation at Break %	650
Modulus of Elasticity Tensile E_t (Mpa)	1300
Modulus of Elasticity Bending E_b (Mpa)	-
Impact Strength kJ/mm ²	NO BREAK
Hardness Ball Indent	80
Creep 1 % after 1000hr MPa	22
Coefficient of friction against Steel m	0.3

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(CONT.)

THERMAL PROPERTIES

Melting Point °C	165
Glass Transition Temperature °C	-18
Thermal Conductivity W/M°C	0.22
Specific Heat J/(g.K)	1.7
Coefficient of Linear Expansion α 10 ⁻⁶ .°K	110
Safe Working Temp. Short Term °C	100
Safe Working Temp. Continuous °C	65
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ELECTRICAL PROPERTIES

Dielectric Constant $\hat{\epsilon}$ 106 Hz	2.25
Dielectric loss Factor tand 106 Hz	0.0002
Volume Resistance W.cm	>10 ¹⁷
Surface Resistance W	>10 ¹³
Dielectric Strength kV/mm	100
Moisture Absorption % (at 50%RH)	0.01

Whilst all care has been taken to provide accurate & up to date information, we cannot provide legal certification of properties. We recommend that this information be used as a design guide only. Actual testing should be undertaken to confirm data if certification is required.