

TECHNICAL DATA SHEET

POLYPROPYLENE

I. Physical Properties	Norm	Unit i. e.	PP
1. Specific gravity (ρ)	ISO 1183	g/cm ³	0,9
2. Water absorption	DIN 53495	%	0,01
3. Chemical resistance	DIN 53476	-	-
4. Max. permissible service temperature (no stronger mech. stress involved)			
upper temperature limit	-	°C	100
lower temperature limit	-	°C	5
II. Mechanical Properties			
1. Tensile strength at yield (σ_s)	ISO 527	MPa	33
2. Elongation at yield (ϵ_s)	ISO 527	%	14
3. Tensile strength at break (σ_R)	ISO 527	MPa	-
4. Elongation at break (ϵ_R)	ISO 527	%	>50
5. Impact strength (a_n)	ISO 179	kJ/m ²	o.B.
6. Notch impact strength (a_k)	ISO 179	kJ/m ²	13
7. Ball indentation hardn.(Hk)/Rockwell	ISO 2039-1	MPa	71
8. Flexural strength (σ_B 3,5%)	ISO 178	MPa	-
9. Modulus of elasticity (E_t)	ISO 527	MPa	1450
III. Thermal Properties			
1. Vicat softening temp. VST/B/50	ISO 306	°C	154
VST/A/50		°C	-
2. Heat deflection temp. HDT/B	ISO 75	°C	103
HDT/A		°C	-
3. Coef. of linear therm. expansion (α)	DIN 53752	K ⁻¹ x 10 ⁻⁴	1,5
4. Thermal conductivity at 20 °C (λ)	DIN 52612	W/(m*K)	0,22
IV. Electrical Properties			
1. Volume resistivity (ρ_D)	VDE 0303	Ω x cm	$\geq 10^{16}$
2. Surface resistivity (R_o)	VDE 0303	Ω	$\geq 10^{13}$
3. Dielectric constant at 1 MHz (ϵ_r)	DIN 53483		2,3
4. Diel. loss factor at 1 MHz ($\tan\delta$)	DIN 53483		-
5. Dielectric strength	VDE 0303	kV/mm	-
6. Tracking resistance	DIN 53480		KB >600
V. Additional Data			
1. Bondability			o
2. Physiol. indifference according	EEC 90/128 FDA		+
3. Friction coefficient	DIN 53375		0,3
4. Flammability	UL 94		HB
5. UV stabilisation			o
VI. Chemical Properties			
1. Acid resistance			+
2. Hydrolysis resistance (delute)			+

3. Hydrocarbonat resistance			+
4. CKW resistance			0
5. Aromatic resistance			-
6. Ketone resistance			+
7. Resistance against hot water			+

Applications:

Wall Cladding	Industrial	Drip Trays	Toys
Cool stores	Bakeries	Breweries	Tunnel Linings
Food Preparation Rooms	Dairy Sheds	Fume Cupboards	Cutting Boards
Butcher Shops	Wineries	Shower Walls	Tank Linings
Freezer Trays	Vats	Storage Bins	Computer File Covers
Plant Pots/Troughs	Seed Chutes	Other Uses	

Options:

SHEET: Extruded grey
 Size: 3000mm x 1500 mm
 Thickness: 3 mm to 25 mm
 ROD: Extruded grey
 Lengths: 1000 mm to 3000 mm
 Diameters: 10 mm to 200 mm

Disclaimer:

All statements, technical information and recommendations contained in this publication are for informational purposes only. Cut To Size Plastics Pty. Ltd. does not guarantee the accuracy or completeness of any information contained herein and it is the customer's responsibility to conduct its own review and make its own determination regarding the suitability of specific products for any given application.