KEYTEC

Polypropylene material specification

The product

Polypropylene is made from flexible polypropylene designed for the high requirements in the application field of ground water reservoirs (irrigation, fire extinguishing water, **fish farming***, **drinking water***) concrete water ponds, canals, ornamental ponds and liquid manure reservoirs. This quality material is produced using modern technology and special raw materials.

* **suitable for food**.

The advantages

- Safe UV-stabilisation and resistance against permanent sun radiation
- Very high density even at permanent deformation
- High adaptability and perforation resistance
- Resistance against root perforation according to DIN 4062 part 1, swell and rot resistant
- Reliable joining with hot wedge, hot-air and extrusion welding
- Confirmation of the film quality through test certificates

Technical data

	TECHNICAL PROPERTIES	UNIT	TEST METHOD	NOMINAL VALUE
Material	Density	g/cm	ISO 1183-87	0.890 ± 0.01
	Melt flow index	g/10min	DIN ISO1133 (2,16/230°C)	0.15-1.0
	Carbon black contents	%	TGA	2-3
Durability	Oxidative Induction time (OIT)	min	ASTM D 3895 (200°C)	>100
	Stress cracking resistance	h	ASTM D 1693	>2000
	Stress cracking resistance	h	ASTM D 5397	>1150
Functional properties	folding behaviour at -20°C		DIN 16726 part 5.14	No tears
Water	Absorption after 7 days	%	DIN EN ISO 62	<0.2
	Dimensional changes	%	DIN 53377 (1h/120°C)	± 2
	After heat aging		DIN 53377 (1h/140°C)	± 3
Mechanical properties	Thickness	.75/1mm		
	Tolerance average values	%	DIN 53370	± 5
	Tensile stress at break	MPa	DIN EN ISO 5271-3	>18
	Elongation at break	%	DIN EN ISO 5271-3	>750
	Tear propagation resistance	N/mm	DIN 53515 (with cut)	>45
	Piercing resistance	N	FTMS 101C	>170

This information is for reference purposes and is not intended as a guarantee.

Polypropylene

Keytec polypropylene has an elongation of >750% to break DIN EN ISO 527 1-3 and stress cracking resistance of 2000 or greater to ASTM D 1693, with dimensional changes after heating no greater than ± 3% to DIN 53377 (14/140 °C)

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