

TECACOMP PP ID grey 1017673 - Compounds

Chemical Designation

PP (Polypropylene)

Colour

grey

Density

1.06 g/cm³

Fillers

detectable filler

former material REZ-RS-4242

Main features

- metal detectable
- x-ray detectable
- Explanation of food contact according to FDA and EU 10/2011 on request

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength	50 mm/min	29	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)	50 mm/min	1550	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)	50 mm/min	35	%	DIN EN ISO 527-1	
Impact strength (Charpy)		52	kJ/m ²	DIN EN ISO 179-1eU	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		13	°C	-	
Melting temperature		165	°C	DIN 53765	
Service temperature	long term	100	°C	-	
Service temperature	short term	130	°C	-	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Detectability	4 x 4 x 4 mm	1,9	mm Al	-	1) (1) metal detectable
Detectability	4 x 4 x 4 mm	1,9	mm Al	-	2) (2) x-ray detectable
Melt flow index (MFI)	230 °C / 2,16 kg	10	g/10 min	DIN EN ISO 1133	
<i>Processing parameter</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Cylinder/processing temperature		200 - 260	°C	-	
Mould temperature		40 - 100	°C	-	
Material temperature		230 - 250	°C	-	

→ This material can be processed as a thermoplastic taking the normal technical provisions into account. The above mentioned information refers exclusively to the injection moulding process.

→ Back pressure and injection rate should be adjusted to the component geometry accordingly. The optimum processing temperature depends upon the respective geometry of the moulded part and can be different from machine to machine.

<i>Pre-drying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Permissible residual moisture content		< 0,1	%	-	
Drying temperature		70 - 100	°C	-	
Drying time		2	h	-	

→ To achieve optimum mechanical properties, it is recommended to pre-dry the material with the above mentioned parameters.

→ Information on storage and shelf life: The granules must be stored in dry, normally tempered rooms and in closed containers. For moisture-sensitive materials, the granules must be sealed airtight. Protection against direct sunlight must be guaranteed. The granules are usually subject to the requirements of no shelf life limitation. Shelf Life may be limited by some additives.

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