

## TECACOMP PA66 ID blue 1014959 - Compounds

### Chemical Designation

PA 66 (Polyamide 66)

### Colour

blue

### Density

1.43 g/cm<sup>3</sup>

### Fillers

detectable filler

former material REZ-RS-4067

### Main features

- detectable via metal detector
- 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		60	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)		3200	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)		10,8	%	DIN EN ISO 527-1	
Flexural strength		90	MPa	DIN EN ISO 178	
Modulus of elasticity (flexural test)		2800	MPa	DIN EN ISO 178	
Bending strain		5,5	%	DIN EN ISO 178	
Impact strength (Charpy)		84	kJ/m <sup>2</sup>	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		5 / 72	°C	-	1) (1) moist / dry
Melting temperature		260	°C	-	
Service temperature	long term	110	°C	-	
Service temperature	short term	170	°C	-	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Detectability	4 x 4 mm	2,9	mm Al	-	1) (1) metal detectable
Water absorption	23 °C / 50 % relative humidity up to saturation	2,0	%	DIN EN ISO 62	(2) X-Ray detectable (3) No listing at UL (Yellow Card).
Molding shrinkage	longitudinal	1,81	%	DIN EN ISO 294-4	
Molding shrinkage	transverse	2,26	%	DIN EN ISO 294-4	
Detectability	4 x 4 mm	3,7	mm Al	-	2)
Flammability (UL94)		HB		DIN IEC 60695-11-10;	3)
Melt flow index (MFI)	280 °C / 2,16 kg	25	g/10 min	-	
MVR	280 °C / 2,16 kg	21	cm <sup>3</sup> /10 min	DIN EN ISO 1133	
Bulk density		0,80	g/cm <sup>3</sup>	EN ISO 60	
<i>Processing parameter</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Cylinder/processing temperature		260 - 310	°C	-	
Mould temperature		90 - 150	°C	-	
Material temperature		290 - 310	°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>Predrying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Permissible residual moisture content		< 0,1	%	-	
Drying temperature		80	°C	-	
Drying time		4 - 8	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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