

# TECACOMP® PPA TRM black 3990V - Compounds

## Chemical Designation

PA 6/6T (Polyamide 6/6T)

## Colour

dark grey

## Density

1.42 g/cm<sup>3</sup>

## Main features

→ good slide and wear properties

## Target Industries

→ automotive industry  
→ mechanical engineering

The compound is in the phase of further development. The characteristic values of this product may change.

Mechanical properties	parameter	value	unit	norm	comment
Modulus of elasticity (tensile test)	50 mm/min	7500	MPa	DIN EN ISO 527-1	
Tensile strength	50 mm/min	120	MPa	DIN EN ISO 527-1	
Elongation at break	50 mm/min	2	%	DIN EN ISO 527-1	
Flexural strength		170	MPa	DIN EN ISO 178	
Modulus of elasticity (flexural test)		6700	MPa	DIN EN ISO 178	
Bending strain		3,5	%	DIN EN ISO 178	
Compression strength		175	MPa	EN ISO 604	
Compression modulus		6000	MPa	EN ISO 604	
Impact strength (Charpy)		40	kJ/m <sup>2</sup>	DIN EN ISO 179-1eU	

Thermal properties	parameter	value	unit	norm	comment
Glass transition temperature		100 - 140	°C	DIN 53765	
Melting temperature		285 - 315	°C	DIN 53765	
Deflection temperature		140	°C	ISO-R 75 Method A	
Deflection temperature		270	°C	ISO-R 75 Method B	
Service temperature	short term	250	°C	-	
Service temperature	long term	150	°C	-	
Thermal expansion (CLTE)	longitudinal (at 23 - 80 °C)	33	10 <sup>-6</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	
Thermal expansion (CLTE)	transverse (at 23 - 80 °C)	67	10 <sup>-6</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2	

Other properties	parameter	value	unit	norm	comment
Molding shrinkage	longitudinal	0,98	%	DIN EN ISO 294-4	1)
Molding shrinkage	transverse	1,22	%	DIN EN ISO 294-4	2)
Melt flow index (MFI)	340 °C / 2,16 kg	50	g/10 min	DIN EN ISO 1133	
MVR	340 °C / 2,16 kg	75	cm <sup>3</sup> /10 min	DIN EN ISO 1133	
Bulk density		0,71	g/cm <sup>3</sup>	EN ISO 60	

Processing parameter	parameter	value	unit	norm	comment
Cylinder/processing temperature		315 - 340	°C	-	
Mould temperature		100 - 120	°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.

Predrying	parameter	value	unit	norm	comment
Drying temperature		80 - 120	°C	-	
Drying time		4 - 6	h	-	

→ In order to achieve optimum mechanical properties, pre-drying of the material is recommended with the parameters mentioned above.

→ Granulate should preferably be stored in dry rooms at normal temperatures and be protected from direct sunlight.

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