

Grilon TSGZ-50

PA666-GF50

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Information

Product designation according to ISO 1874:

PA66+PA6 HI, MHR, 14-160N, GF50

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	16500 / 10000	MPa	ISO 527-1/-2
Stress at break	240 / 150	MPa	ISO 527-1/-2
Strain at break	3 / 5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 90	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 20	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	11 / 12	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	250 / 140	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	260 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	220 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.0 MPa)	165 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	15 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	90 / -	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	90 - 120	°C	EMS
Max. usage temperature (short term)	180	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E12 / 1E11	Ohm*m	IEC 60093
Surface resistivity	- / 1E12	Ohm	IEC 60093
Electric strength	27 / 22	kV/mm	IEC 60243-1
Comparative tracking index	- / 550	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	6 / -	%	Sim. to ISO 62
Humidity absorption	1.5 / -	%	Sim. to ISO 62
Density	1560 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.1 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.4 / -	%	ISO 294-4, 2577

Characteristic
Processing

Injection Molding

Automotive

Powertrain and Chassis , Interior

Special Characteristics

High impact or impact modified

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Electricals & Electronics

Electrical appliances, Connectors

Industry & Consumer goods

Housewares, Mechanical Engineering, Power transmission, Sports & Leisure, Tools & Accessories