

Grilon TSG-50/4 W

PA666-GF50

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA 66+PA 6, MHR, 14-160 N, GF 50

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	16500 / 12000	MPa	ISO 527-1/-2
Stress at break	230 / 150	MPa	ISO 527-1/-2
Strain at break	2.5 / 5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	90 / 80	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / 18	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	13 / 12	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	270 / 150	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)	250 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	215 / -	°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)	130 - 150	°C	ISO 2578
Max. usage temperature (short term)	230	°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	- / 525	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	5 / -	%	Sim. to ISO 62
Humidity absorption	1.5 / -	%	Sim. to ISO 62
Density	1550 / -	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)	0.3 / -	%	ISO 294-4, 2577

Characteristics

Processing

Injection Molding

Delivery form

Granules

Automotive

Air intake sytems, Hydraulic systems, Automotive electr. and electronics, lighting, Cooling and climate control

Electricals & Electronics

Lighting



Special Characteristics

Improved heat resistance

Regional Availability

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

Industry & Consumer goods

Heating systems, Hydraulics & Pneumatics, Mechanical
Engineering, Sports & Leisure

