

ISO 2039-1

Grilamid 1SBVX-55H nat PA1010-GF55

EMS-GRIVORY | a unit of EMS-CHEMIE AG

MPa

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Product-nomenclature acc. ISO 1874: PA1010+X, MH, 16-160, GF 55

Mechanical properties (TPE)

Ball indentation hardness

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	17500 / 16500	MPa	ISO 527-1/-2
Stress at break	210 / 180	MPa	ISO 527-1/-2
Strain at break	2.5 / 2.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 75	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	85 / 80	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 14	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	200 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	185 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	150 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	10 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	80 / -	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)	100	°C	ISO 2578
Max. usage temperature (short term)	150	°C	EMS

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Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E10 / 1E10	Ohm*m	IEC 60093
Surface resistivity	- / 1E12	Ohm	IEC 60093
Electric strength	36 / 36	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	1.7 / -	%	Sim. to ISO 62
Humidity absorption	0.9 / -	%	Sim. to ISO 62
Density	1590 / -	kg/m³	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 **Product Attributes**

Improved flowability and demoulding, Bio based Polyamide Injection Molding

Delivery form Automotive

Granules Compressed air systems, Hydraulic systems, Automotive electr. and electronics, lighting, Powertrain and Chassis, Interior, Exterior

Special Characteristics

High impact or impact modified, Improved UV resistance (outdoor

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