

ISO 2039-1

# **Grilamid LV-23 X ESD** PA12-GF23

# EMS-GRIVORY | a unit of EMS-CHEMIE AG

MPa

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Product designation according to ISO 1874:

PA12, MHRZ, 18-060, GF23+C

Mechanical properties (TPE)

Ball indentation hardness

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	- / 5500	MPa	ISO 527-1/-2
Stress at break	- / 100	MPa	ISO 527-1/-2
Strain at break	-/5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	- / 55	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	- / 35	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	- / 10	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	-/8	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	178 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	160 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	110/-	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	110/-	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	120 / -	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	ISO 2578
Max. usage temperature (short term)	150	°C	EMS

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Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	- / 100	Ohm*m	IEC 60093
Surface resistivity	- / 1000	Ohm	IEC 60093

Other properties	dry / cond	Unit	Test Standard
Water absorption	1.2 / -	%	Sim. to ISO 62
Humidity absorption	0.5 / -	%	Sim. to ISO 62
Density	1230 / -	kg/m³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.3 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	1.0 / -	%	ISO 294-4, 2577

### Characteristics

Processing

Injection Molding

Delivery form

Granules

Special Characteristics

Anti-static, High impact or impact modified, Improved UV resistance (outdoor use), Improved heat resistance

#### Regional Availability

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

## **Product Attributes**

Hydrolysis resistant

# Automotive

Fuel systems

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