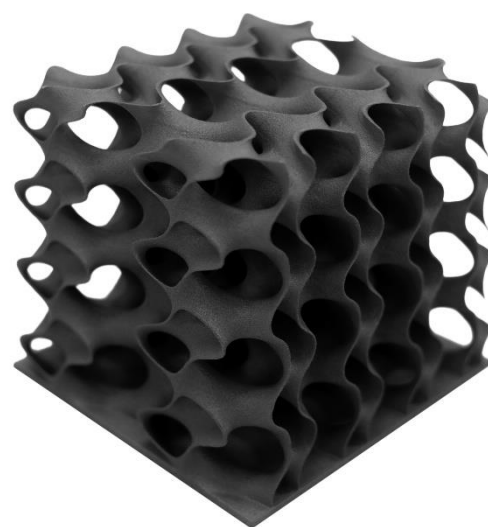


# PA 11 ESD

## Material datasheet PA 11 ESD

### general properties

properties	unit	value
base material	–	PA 11
colour	–	black / anthracite gray
density laser-sintered	g/cm <sup>3</sup>	1,07
surface roughness (Ra/Rz)	µm	6–10 / 35–45
precision	mm	+/- 0,7 %, min. 0,1 mm
minimal wall thickness	mm	1,0



### mechanical properties

properties	unit	value
flexural modulus	MPa	1.650 – 2550
tensile modulus	MPa	1.550 – 2300
tensile strength	MPa	47 – 55
elongation at break	%	22 – 31
Izod impact strength	kJ/m <sup>2</sup>	81 – 83
Izod notched impact strength	kJ/m <sup>2</sup>	5,5 – 7,9
Charpy notched impact strength	kJ/m <sup>2</sup>	5,3 – 7,3
Charpy impact strength	kJ/m <sup>2</sup>	101 – 107



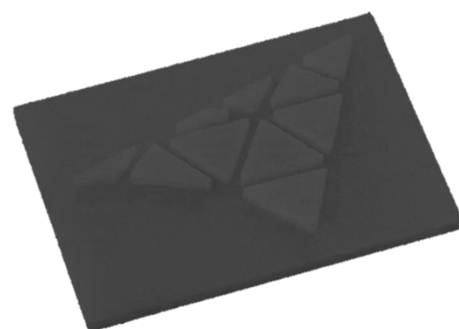
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# PA 11 ESD

## Material datasheet PA 11 ESD

### thermal properties

properties	unit	value
melting point	°C	204
temperature of deflection (1,80 MPa)	°C	111
temperature of deflection (0,45 MPa)	°C	186
Vicat softening temperature B/50	°C	183
Vicat softening temperature A/10	°C	192
UL Flammability	mm	HB (0.7-3.0mm)



### electrical properties

properties	unit	value x-direction	value z-direction
specific Volume resistivity	$\Omega \cdot \text{cm}$	$2,3 \cdot 10^6$	$2,1 \cdot 10^5$
specific Surface resistivity	$\Omega$	$1,3 \cdot 10^4$	$3,4 \cdot 10^4$
Dielectric strength	kV/mm	0	0



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