

Alumide

PA12-MED(AI)

EOS GmbH Electro Optical Systems

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3800	MPa	ISO 527
Tensile Strength	48	MPa	ISO 527
Strain at break	4	%	ISO 527
Flexural modulus, 23°C	3600	MPa	ISO 178
Charpy impact strength, +23°C	29	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	4.6	kJ/m ²	ISO 179/1eA
Shore D hardness	76	-	ISO 7619-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	176	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	144	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	175	°C	ISO 75-1/-2
Vicat softening temperature, B	169	°C	ISO 306

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	13	-	IEC 62631-2-1
Relative permittivity, 1MHz	10	-	IEC 62631-2-1
Dissipation factor, 1MHz	180	E-4	IEC 62631-2-1
Volume resistivity	3E12	Ohm*m	IEC 62631-3-1
Surface resistivity	5E14	Ohm	IEC 62631-3-2
Electric strength	0.1	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Density	1360	kg/m ³	ISO 1183

Characteristics

Regional Availability

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