

250-C

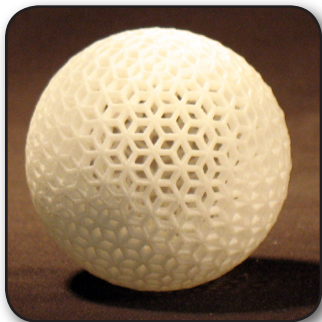
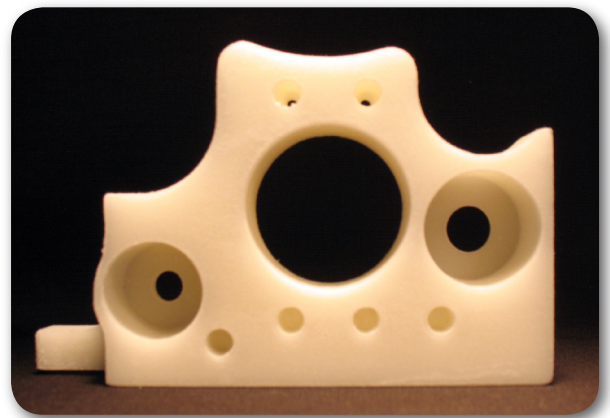
Performance Polyamide



Engineered Materials For Rapid Manufacturing

“An engineered polyamide which produces high strength parts with excellent surface finish while eliminating waste powder from your process.”

- **Tightly controlled particle size distribution produces superior part surface finish and feature definition.**
- **Material stabilized against degradation eliminates waste and dramatically reduces cost.**
- **Produces tough, flexible parts that may be used for many applications.**



Advanced Laser Materials' RM² 250-C is a specially formulated polyamide engineered for laser sintering. The exceptional breakthrough in the RM² 250-C material is its high process stability. The polyamide bases of the RM² 250-C are engineered to ensure that un-sintered powder can be repeatedly reused in your production process. This means little to no waste product from your process and a considerable material cost savings.

The high strength and elongation to break of RM² 250-C material parts allow users to fabricate parts for a wide variety of applications where toughness and flexibility are paramount.

The excellent reusability of the RM² 250-C material through your process also ensures highly repeatable results from build to build, a fundamental requirement for rapid manufacturing.

ALM's line of Rapid Manufacturing Materials (RM²) are produced to high quality standards. Every material shipment is accompanied by detailed quality conformance documents to support your quality manufacturing standards.



RM² 250-C Data Sheet

MATERIAL PROPERTIES	TEST	RM ² 250-C
Density, Bulk	ASTM D1895	0.50 g/cc
Particle Size		
	d90 Laser Diffraction	55-60 μm
	d50 Laser Diffraction	40-50 μm
	d10 Laser Diffraction	30-40 μm

THERMAL PROPERTIES	TEST	RM ² 250-C
Melting Point	ASTM D3418	181 °C
Melt Flow Rate (180 sec., 2.16kg, 235 °C)	ASTM D1238	7 ± 2 g/10 min

TYPICAL PART PROPERTIES	TEST	RM ² 250-C
Tensile Strength, Ultimate		
	XY Orientation	ASTM D638 46 MPa / 6700 psi
	Z Orientation	ASTM D638 36 MPa / 5200 psi
Tensile Modulus	ASTM D638	1,740 MPa / 256 ksi
Elongation at Break		
	XY Orientation	ASTM D638 16 %
	Z Orientation	ASTM D638 4 %
Heat Deflection Temp. (1.82 MPa)	ASTM D648	86 ± 1 °C
Sintered Part Density	ASTM D792	0.98g/cc

SURFACE FINISH	TEST	RM ² 250-C
Unfinished Part	ISO 4287	9 ± 1 μm

ELECTRICAL PROPERTIES	TEST	RM ² 250-C
Volume Resistivity (50% RH, 22 °C, 500V)	ASTM D257-93	3.1 x 10 ¹⁴ Ohm/cm

CHEMICAL RESISTANCE

Matrix in Polyamide 12 with a good chemical resistance to alkaline, hydrocarbons, oils, gasoline's, gas oil and solvents. Attack by the acids. Sealing of wall starting from 1.6 mm thickness.

Warranty/Disclaimer: Actual part properties may vary significantly from those listed above based on processing parameters, operating conditions, and material usage. Advanced Laser Materials, LLC makes no warranties of materials for any particular application, nor does it make a warranty of any type, expressed or implied, including, but not limited to, the warranties of merchantability for a particular purpose.

It's a custom industry, so why not expect custom results?

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