Matter3D Designs & Manufacturing Inc
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Innovating Tomorrow's Materials

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Technical Data Sheet: Impact Modified PLA Matte

Description: Matter3D Matte Impact-Modified PLA combines the ease of printing and toughness of our impact-modified PLA with a refined, low-gloss surface finish. Formulated with approximately finely dispersed matting agent, this material produces smooth, uniform matte surfaces while reducing the visibility of layer lines.

Physical Properties	Standard	Units	Recorded Value
Density	ISO 1183	g/mL	1.31

Mechanical Properties	Standard	Unit	Recorded Value
Tensile Strength, Break	ISO 527	MPa	59
Elongation at break	ISO 527	%	15
Flexural Strength	ISO 178	MPa	81
Flexural Modulus	ISO 178	MPa	2754
IZOD Impact, charpy	GB/T 1843	kJ/m^2	8

Thermal Properties	Standard	Unit	Recorded Value
Glass Transition Temp. Tg	DSC	°C	65
Heat Deflection Temperature at 0.45 MPa	ISO 75	°C	75

Electrical Properties	Standard	Unit	Recorded Value
Surface Resistance	ASTM D257	Ω / sq	$>10^{13}$

Printer Settings:
Extruder Temperature: 200-220°C
Build Plate Temperature: 65°C
Fan speed: 100%
Print Speed: < 1000 mm/s
Max Volumetric Flow: < 30 mm^3 / s on 800 micron nozzles

Notice:
Typical values, not specifications. Performance varies with printer, part geometry, and settings. Users must verify fitness for purpose and comply with regulations. Matter Industries Inc. provides no warranties and assumes no liability.