



# TECHNICAL DATA SHEET

## PLA NX2

### 1. DESCRIPTION

PLA NX2 MATT & TOUGH is a new generation of PLA with improved mechanical properties compared to normal PLA. The optimised interface offers detailed print quality. It is also suitable for mechanically stressed parts due to its impact resistance and higher flexibility.

### 2. FEATURES

- Matte surface
- Mechanically loadable
- CO2 neutral
- Good tensile strength
- Improved UV resistance
- Complies with FDA, RoHS and Safety of Toys regulations

### 3. PROPERTIES

TEST	METHOD	UNIT	VALUE
Flexural modulus (E-Modulus)	ISO 178	MPa	2650
Tensile modulus (E-Modulus)	ISO 527	MPa	2600
Tensile strength	ISO 527	MPa	47
Elongation at strength	ISO 527	%	4
Stress at break	ISO 527	MPa	23
Nominal elongation at break	ISO 527-2	%	19
Notched impact strength	ISO 179/1eA	kJ/m <sup>2</sup>	7
Unnotched impact strength	ISO 179/1eU	kJ/m <sup>2</sup>	no break
VICAT A (VST)	ISO 306	°C	60*
Melting temperature	ISO 3146-C	°C	180-200
MFR	ISO 1133	g/10min	5
Shrinking	ISO 294-4	%	0.3
Density	ISO 1183	g/cm <sup>3</sup>	1.3

\*Temperature resistance tested at a minimum wall thickness of 4 mm.

#### PRINT SETTINGS

Nozzle	200-230°C
Heatbed	20-60°C
Adhesive	not required
Speed	20-200mm/s
Cooling	30-100%
Enclosed Space	no
Hardened Nozzle	no
Max. Volumetric Speed	21 mm <sup>3</sup> /s

Recommended settings for printers with a 0.4mm Nozzle.  
Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.

### 4. CERTIFICATIONS & ADDITIONAL INFORMATION



FDA  
compliant



RoHS  
compliant



REACH  
compliant



FREE  
of Silicone



DEGRADABLE  
ISO 14885



TOY SAFE  
compliant

Certifications depend on colors in final product. More info in the additional information sheet.

### 5. STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight.  
When stored correctly, this material has a shelf life of 2 years.  
Additional info in our regulatory, additional information and chemical resistance data sheets.