

# **TEHNICAL DATA SHEET NATURAL PLA**

Date of issue: 17.06.2017 Date of update: 24.09.2023

# **Product description:**

NATURAL PLA is a polylactic acid polymer specifically designed for FDM/FFF 3D printing. This grade of PLA is known for its ease of printing, good layer adhesion, and glossy surface finish. NATURAL PLA is biodegradable under industrial composting conditions and is derived from renewable resources such as corn starch. It is primarily used for prototyping, decorative objects, and non-functional parts.

## Storage:

Store in dry area, in a closed container away from moisture.

### **PRODUCT PARAMETERS** Parameter Value Filament diameter [mm] 1.75 +/- 0,01 Diameter tolerance [mm] Oval tolerance [mm] +/- 0,01 Spool dimensions [mm] 200/57/52 (ø / height / hole ø ) Spool weight [g] 204 **Transparent SAN** Spool material Weight with packaging [g] 1 550 1 000 Net weight [g] 52 mr 203/207/70 Box dimensions [mm] **RECOMMENDED PRINTING PARAMETERS**

Parameter	Value
Print temperature [°C]	200-230
Bed temperature [°C]	None needed or 50-60 if applicable
Cooling [%]	100 recommended for better surface quality
Closed chamber	Not required, but may improve print
Chamber temperature [°C]	30-60
Printing Speed [mm/s]	40-100
Nozzle type	-

# PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1.24	g/cc	D792
Melt flow rate	6	g/10min	D1238
Vicat softening temp.	55-60	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	3600	MPa	D882
Tensile strength	53	MPa	D882
Elongation at break	6	%	D882
Impact strength	16	J/m2	ISO 179 Charpy Notched @23°C (73°F)

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of NATURAL PLA parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use.

TAG PLASTURGIE 188, Zone Industrielle Ouest Mohammedia 28810 MAROC

Identifiant fiscal 40109795 RC N° 8129 - Patente N° 39564055 ICE 000194720000057

Phone: (+212) (0)523 315 140 Email: contact@tag-plasturgie.com Website: www.tag-plasturgie.com