SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200:2012, ANSI Z400.1-2010, and ISO 11014-1:

2009

FILAMENT NOCTUO PLA



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Supplier and manufacturer:

Noctuo Sp. zo.o. ul. Sowińskiego 5 44-121 Gliwice, Polska

Product Name:

Filament Noctuo PLA

Intended use:

FDM 3D printing material

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Regulation (EC) No 1272/2008 (CLP)

is not classified as dangerous according to Regulation (EC) No 1272/2008 [CLP] and Directive 67/548/EEC.

Label elements

Hazard pictograms : Not applicable Signal word : Not applicable Hazard statement : Not applicable Potential health effects: See section 11 Environmental recommendation: See section 12

Other hazards

In case of high concentration small dust particles of the product in the downstream process operation, There is a risk of ignition. More information in sections 7 and 8.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Conc. / %
Polylactide / 9051-89-2	>98
Dyes or enhancers	<2

4. FIRST AID MEASURES

Description of first aid measures

After eye contact :

Get medical attention if eye symptoms occurred. Flush eyes with water for at least 15 minutes.

After skin contact :

At room temperature, the product is not irritating to skin. In case of irritation, wash the skin with water and soap. If symptoms persist, consult with doctor. In case of contact with hot liquid polymer, immediately cool the skin with cold water. DO NOT peel the warm polymer from the skin. Consult with your doctor.

After inhalation :

Go to fresh air. Consult immediately doctor.

After ingestion :

Preventively - rinse mouth with water and drink plenty of water amount of water. Do not induce vomiting! Consult with doctor.

Notes to physicians

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Combustibility:

Temperature of self-ignition: 388 °C

Explosion limits:Lower explosion limit (%):Not applicableUpper explosion limit (%):Not applicable

Suitable extinguishing media:

Extinguishing foam, water, carbon dioxide (CO2), powder extinguisher. The use of foam resistant to alcohol is recommended. Other types of extinguishing foam may also work but will be much less effective.

Unsuitable extinguishing media:

None

Special protective equipment:

Self-contained breathing apparatus

Fire procedures:

Cool product containers by spraying water. Water mist can be used to cool closed spaces containers. Fine dust dispersed in the air can become ignite. Risk of ignition and flame spread or secondary explosions can be reduced by avoiding dust accumulation, f.e. on floor and shelves.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid contact with skin and eyes. Avoid dust accumulation. Remove potential sources of ignition

Environmental precautions

Do not pour into surface waters and sewage systems. Don't allow material to contaminate groundwater.

Methods for cleaning up

Clean up immediately with a sweeper. Sweep and collect inappropriate containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Use personal protective equipment. Avoid contact with eyes and skin. Users should be protected from possibility of contact with molten material during use. Avoid accumulation of dust. When small particles are generated during further processing, handling or by other means, they may create a combustible dust concentration in the air.

Conditions for safe storage

Store at a temperature not exceeding 50° C in a dry, shaded place. Protect from sunlight, dust, dirt and moisture. No special restrictions for storage with other products

Special precautions

No special precautions are required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls :

It is recommended to use the product in well-ventilated areas. Ensure adequate ventilation exhaust in the areas of dust formation.

Exposure limits:

Not established. The material can generate unclassified particles (PNOC).

Personal protective equipment:

Eye protection :

Safety glasses with side shields.

Skin and body protection:

Impermeable clothing.

Respiratory protection

When working in a poorly ventilated room and high exposure to dust, use a breathing apparatus.

Hand protection

Preventive skin protection.

Other

Users should be protected from the possibility of contact with molten material during processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical form:	Solid
Appearance:	Circular profile
pH:	Not applicable
Odor :	Sweet
Vapor pressure :	Not specified
Vapor density:	Not specified
Evaporation rate:	Not specified
Density:	1.25
Decomposition temperature:	250 °C

Boiling point/boiling range:	Not applicable
Melting point / Melting range:	150-180 °C
	Tg (glass transition temperature): 55-60 $^\circ ext{C}$
Auto-ignition temperature:	388°C
Solubility in water	Insoluble
Solubility in other solvents:	Not determined

10. STABILITY AND REACTIVITY

Reactivity Under normal use conditions none.

Chemical stability

Stable under recommended conditions.

Conditions to avoid

Temperatures above 230°C. Avoid prolonged melting and storage for long periods of time at very high temperatures.

Materials to avoid Oxidizers, strong bases

Hazardous decomposition products

Combustion produces odorous and toxic fumes, aldehydes, carbon monoxide (CO), carbon dioxide (CO2).

Potential for hazardous reactions:

Under normal use conditions none.

11. TOXICOLOGICAL INFORMATION

Main routes of exposure	Eye contact, skin contact, respiratory tract, inhalation, ingestion.
Acute toxicity ingredients.	No data available. Not found in tests of the product's base
Local effects	Product dust may be irritating to eyes, skin and respiratory tract. Small particles of the material, as with the case of other inert materials, are mechanically irritating to the eyes. Ingestion can cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhea
Additional information	May cause irritation and/or inflammation of the skin. Inhalation of dust may cause shortness of breath, chest tightness, sore throat and coughing. Burning produces irritating fumes.
Long-term toxicity	The product did not cause allergic skin reactions in tests using guinea pigs
Germ cell mutagenicity	The product is not mutagenic according to the AMES test.
Carcinogenicity	None of the ingredients in this product are listed as a carcinogen by IARC, NTP or OSHA.
LD/LC50 values	Dermal: LD50 > 2000 mg/kg (rabbit). Dosage: LD50 > 5000 mg/kg (rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity

EC50 / 72h / Algae > 1100 mg/L

Persistence and degradability

Completely biodegradable under conditions of industrial composting

Bioaccumulation

Not expected to bioconcentrate or bioaccumulate.

Mobility in soil

There are no data available on the preparation/mixture itself.

13. DISPOSAL CONSIDERATION

Waste treatment methods

In accordance with local and national regulations (i.e. EU 91/15/CEE, EU 91/689/CEE, EU 94/62/CEE AND the following them) waste should not be released into the environment. Do not pollute ponds, waterways or canals with product or used packaging.

14. TRANSPORT INFORMATION

ADR\RID

Proper shipping name: None Harm class: Not applicable Packing group: None

U.S. Department of Transportation (DOT)

Proper shipping name: None Harm class: Not applicable Packing group: None Hazardous Substances (RQ): None

IMDG Proper shipping name: None Harm class: Not applicable Packing group: None UN number/Id: None

ICAO/IATA

Proper shipping name: None Harm class: Not applicable Packing group: None UN number/ld: None

15. REGULATORY INFORMATION

Legal requirements are subject to change and may vary from location to location. The user is obliged to ensure that all his actions comply with all state, federal, state or provincial and local governments legal regulations and regulations.

Safety, health and environmental regulations specific to the US EPA TSCA substances and mixtures:

Sara 313 title III:	Not listed		
TSCA Inventory List:	Listed		
The product monomers are listed in the documents:			
Canada DSL Inventory List :	Listed		
REACH/EU EINECS List :	Components are compliant and/or are listed		
Japan (ECL) :	Listed		
Australia (AICS):	Listed		
Korean chemical inventory:	Listed		
China inventory of existing chemical substances list :	Listed		

16. OTHER INFORMATION

The data and information contained in this safety data sheet are based on our best knowledge from the last inspection. We cannot give a guarantee that any of the health and safety measures described here will be sufficient, as well as that other actions will not be required as a result of an individual or unique situation arising. User is responsible for verifying for himself that the information is correct and complete with respect to the specific use of the preparation.