

Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identification

Trade name: Filament PLA 1.75mm
Filament PLA 3.00mm

1.2 Product use

Application: Thermal processing in three-dimensional printing process.

1.3. Manufacturer's identification

Manufacturer: Devil design Marek Ryszka
ul. Górna 31
43-195 Mikołów, Poland
Tax ID Number: 6351806335
Tel. : +48 727 624 216
E-mail: marek@devildesign.pl

1.4. Emergency telephone number

Phone Number: (+48) 727 624 216 (Mon. - Friday from 9:00 to 15:00 {GMT + 01:00})

SECTION 2: HAZARDS IDENTIFICATION

2.1. Product classification

Classification according to directive: Product is not classified as harmful in accordance with EU regulation 1272/2008, directive 67/548ECC and respective national laws.

2.2. Labelling elements

Marking: In accordance with applicable directives and national regulations this product does not require labelling.

2.3. Other risks

There is a risk of swallowing. Inhalation of gases and vapours created during the process causes respiratory system irritation. Gases and vapours produced in the process cause skin and eyes irritation via inhalation.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.2 Mixtures

Composition:	Poly lactides resin, a colorant, dyestuff
Chemical name:	Poly lactide
Common Name:	PLA
Type of plastic:	Thermoplastic

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:	No emergency measures are not necessary
Skin contact:	In case molten product contacts skin - immediately rinse affected place with plenty of water for at least 15 minutes. Contact your doctor for medical attention.
Eye contact:	In case of contact with eyes rinse thoroughly with plenty of water for at least 15 minutes. Contact your doctor for medical attention.
Exposure by inhalation:	Breathe fresh air. Immediately seek medical attention.
Exposure by ingestion:	If swallowed, do not induce vomiting. Immediately seek medical attention.

4.2. Main acute and delayed symptoms and exposure effects

Not known

4.3. Indications for any immediate medical assistance and special treatment needed.

In case of detecting any disturbing symptoms or accident immediately call a doctor for medical assistance.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Fire extinguishing measures

Suitable extinguishing agents:

- Water spray
- Foam
- Carbon dioxide (CO₂)
- Extinguishing powder

Extinguishing agents, which cannot be used for safety reasons:

- Strong concentrated stream of water

5.2. Specific risks associated with substance or mixture

Hazardous combustion products:

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Aldehyde
- Sulphur oxides

5.3. Information for fire department

Personal protective equipment for fire-fighters:

- Self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Individual precautions, protective equipment and emergency situations procedures

6.1.1. For people who are not first aid personnel

Protective equipment:

Use personal respiratory protection during exposure to gases and vapours.
Wear personal protective equipment (see Section 8).

Emergency situation procedures

Remove ignition source. Avoid contact with skin and eyes. Avoid breathing gases and vapours.

6.1.2. For first aid personnel

Use personal respiratory protection during exposure to gases and vapours.
Use personal protection equipment (refer to Section 8).

6.2. Environmental protection precautions

Contain the product to prevent discharge into the sewerage, surface and ground-water system.

6.3. Methods and materials to avoid the spread of contamination and for the disposal of contamination

Remove mechanically.

6.4. References to other section

Personal Protection - see section 8.
Treatment of waste - see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautionary measures for safe handling

Handling the substance or preparations :

Product must be processed in a well-ventilated environment. If required - additionally use air ventilation system.

General rules of industrial hygiene:

When working with the product do not consume food and beverages, do not smoke in work place. Wash hands after contact with the product.

7.2. Conditions for safe storage, including information on any mutual in consist

Technical measures and storage conditions:

Product must be stored in a dry, shaded place at room temperature. Protect against moisture, dust and dirt.

Storage with other substances/preparations:

Refer to SECTION 10.4.

No specific rules for storage with other substances/preparations defined.

7.3. Specific final use(-s)

Do not set out specific recommendations.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Substance name: Technical dust			
EU Number: 215-609-09		CAS Number: 1333-86-4	
Legal basis/Legal provisions	Update	Value type	Values
On maximal allowable concentrations of toxic substances in work place in the country: Poland. Maximal allowable concentrations and levels of toxic substances in work place.	29/11/2002	Highest allowable concentration	4mg/m ³

The product may secrete molecules classified (PNOC).

DNEL/DMEL value: No data available

PMEC value: No data available

Values indicated on the basis of known characteristics of mixture component/-s.

8.2. Exposure controls

General protection principles: Product must be processed in a well-ventilated room; if required, additionally use air exhaust ventilation system. It is necessary to comply with Directive 89/686/EEC and subsequent amendments thereto.

Eye and face protection: Use protective goggles

Hand protection: Use protective gloves

Respiratory Protection: In the case of exposure to dust/vapours, use respiratory protection with dust filter. Equipment must be used in accordance with the EU 8.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information about basic physical and chemical properties

Physical state:	Solid
Appearance:	Wire
Colour:	Colourless and depending on the dyestuff it may be: white, yellow, orange, pink, beige, green, red, blue, navy blue, gray, brown or black
Odour:	During processing sweet
Odour Threshold:	No data available
pH value:	Not applicable
Melting point:	>80 °C
Boiling point/boiling range:	Not applicable
Evaporation Rate:	Not applicable
Flame Retardants:	No data available
Upper/lower limit flammability:	No data available
Vapour pressure:	Not marked
Vapour density:	Not marked
Density:	1.24 g/cm ³
Solubility in water:	Insoluble
Solubility in other liquids:	No data available
Partition coefficient n-octane/water:	Not applicable
Self-ignition temperature:	>387 °C
Thermal decomposition:	See section 10.4.
Viscosity:	4,02
Explosive properties:	No data available
Oxidizing properties:	No data available

According to the colour product, its physical and chemical properties may be slightly different.

9.2. Other information

Surface tension:	No data available
Thermal conductivity:	Not Marked
Electrical conductivity:	Not Marked

There is no danger of explosion

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Data not available. Refer to SECTION 10.3.

10.2. Chemical stability

Stable under recommended storage conditions. Refer to SECTION 7.2.

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions prescribed for use.

10.4. Conditions to avoid

Temperatures above 230°C. Electrostatic discharges. Working with the product in poorly ventilated areas

10.5. Incompatible materials

Oxidants, strong bases

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Skin LD 50 >2,000 mg/kg (rat)
Mouth LD 50 >5,000 mg/kg (rat)
Product has not been tested. Values indicated on the basis of known characteristics of the component/s mixture.

Irritating to skin: May cause skin irritation.

Irritating to eyes: May cause eyes irritation.

Allergenicity: Product is hypo allergic.

Mutagenic effects: No evidence of mutagenicity stated.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Effect on living organisms: No data available

12.2. Persistence and degradability

Product fully degradable

12.3. Bioaccumulation potential

Product unable to bioaccumulate

12.4. Mobility in the soil

No data available

12.5. PBT/ vPvB properties evaluation

According to the results of the assessment the substance is not a PBT or vPvB or the mixture does not contain any substances rated as PBT or vPvB

12.6. Other adverse effects

Refer to: SECTION 6.2.

SECTION 13: WASTE DISPOSAL CONSIDERATIONS

13.1. Waste disposal methods

Do not discharge waste into the sewer system. Waste must be disposed in compliance with applicable local regulations and in accordance with Directives: 91/156/EEC, 91/689/EEC, 94/62/EEC and relevant amendments. The same shall apply for packages.

SECTION 14: TRANSPORT INFORMATION

Section 14.1. to 14.5.

IMDG CODE:	Not applicable/No restrictions
ICAO/IATA:	Not applicable/No restrictions
ADR/RID:	Not applicable/No restrictions

14.6. Special precautions for users

Refer to: SECTION 6, SECTION 7 and SECTION 8.

14.7. Bulk transport in accordance with Annex II to Marpol Convention 73/78 and IBC Code

Under the provisions of IBC Code there is no bulk transport. Information is quoted based upon the information available on properties of the component/-s mixture.

SECTION 15: LEGAL NOTICE

15.1. Legal provisions on safety, health and environmental protection specific to the substance or mixture

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Applicable legal provisions: Journal of Laws as of 2011 No. 63 item 322); Journal of Laws of 2009 No. 20 item 106); Journal of Laws of 2012 no. 0 item 1018 as amended; Restructured European ADR Agreement on International transportation of hazardous materials; Journal of Laws 04.96.959 as amended; Journal of Laws of 2003 no 169 item 1650.

15.2. Chemical safety assessment

Product is not classified as hazardous under EU regulation 1272/2008 and Directive 67 / 548EEC. For described substances or ingredients until the last update is not available chemical safety assessment (CSA).

SECTION 16: OTHER INFORMATION

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