

SECTION 1: Product and manufacturer identification

1.1. Product ID

Trade name: Filament PET-C 1,75 mm
PET-C 2.85 mm

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified applications: Filament used in 3D printers.

1.3. Data on the safety data sheet provider

MAH: NEBULA FILAMENTS Ryszard Bieda

Address: Stare Bystre 356, 34-407 Stare Bystre, Poland

Phone: +48 600 227 702

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1.4. Emergency telephone number

112 (emergency telephone), 998 (fire brigade), 999 (emergency)

SECTION 2: Hazard identification

2.1. Classification of a substance or mixture

The product is not classified as hazardous to human health and life and the environment.

2.2. Marking elements

Hazard pictograms and warning password - There is no. Hazard statements - There is no.

Precautionary statements - There is no.

2.3. Other hazards

There is a risk of swallowing. Inhalation of gases and vapours produced during processing causes respiratory irritation. Gases and vapours produced by the processing process cause skin and eye irritation.



SECTION 3: Composition and information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical characteristics

Composition: Clycol ethylene terephthalate,

Chemical name: Clycol-modified polyethylene

terephthalate

Common name: PET-G

Plastic type: Thermoplastic plastic (thermoplastic polymer)

Section 4: First aid measures

4.1. Description of first aid measures

General information:

No emergency measures are necessary Skin contact:

In case of contact with the melted product, wash the contact area immediately with plenty of water for at least 15 minutes. Contact your doctor.

Eye contact:

Wash your eyes abundantly with plenty of water for at least 15 minutes. Contact your doctor.

Inhalation exposure:

Get in touch with fresh air. Contact your doctor immediately.

Exposure by oral route:

If swallowed, do not induce vomiting. Contact your doctor immediately.

4.2. The most important acute and delayed symptoms and effects of exposure

There are no reports of adverse effects or critical hazards with the correct use of the product. Prolonged inhalation of fumes arising from the printing process can cause headaches, decreased concentration, fatigue.

PETG MATERIAL SAFETY DATA SHEET

4.3 Indications for any immediate medical attention and special treatment of the victim

The decision on the procedure of the emergency is made by the doctor after a thorough assessment of the condition of the victim. Symptomatic treatment.

SECTION 5: Fire handling

5.1. Extinguishing agents

Suitable extinguishing agents: carbon dioxide, extinguishing powder, extinguishing foam, sprayed water jet.

Inappropriate extinguishing agents: compact water flow – danger of spreading fire.

5.2. Specific risks associated with a substance or mixture

Toxic gases and fumes containing, inter alia, carbon monoxides and other harmful thermal decomposition products may be formed during combustion. Avoid inhalation of combustion products, may pose a health risk.

5.3. Information for the fire brigade

General protection measures typical in the event of a fire. Do not stay in a fire-threatened area without adequate clothing that is resistant to chemicals and breathing apparatus with independent air circulation. Waste extinguishing agents should not be allowed into sewers, surface water and groundwater.

SECTION 6: Dealing with unintentional release into the environm ent

6.1. Individual precautions, protective equipment and emergency procedures

6.1.1. For persons not belonging to the

staff providing assistance Protective equipment:

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

Emergency procedures:

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

PETG MATERIAL SAFETY DATA SHEET

6.1.2. For persons providing assistance

Use individual respiratory protection during exposure to gases and vapours. Personal protective equipment (see SECTION 8).

6.2. Environmental precautions

Do not allow entry into sewer systems and surface water and groundwater.

6.3. Methods and materials to prevent the spread of contamination and to remove contamination

Remove mechanically.

6.4. References to other sections

Personal protective equipment see SECTION 8.

Waste management – see SECTION 13.

SECTION 7: Handling and storage of substances and mixtures

7.1. Precautions for safe conduct

Work according to health and safety rules. Use the product as intended. In the event of rubbing or rubbing, electrostatic charges may accumulate on the surface of the filament, which can be transferred to the user. The accumulated charge can be a source of ignition – special care should be taken when working with flammable materials.

7.1. Safe storage conditions, including information on any cross-compliance

Store the filament in a dry and cool room, protecting against weather ingress (sunlight, frost, precipitation, etc.). Protect from fire sources and open flames. Do not store with non-conforming materials (see subsection 10.5).

7.3 Specific end-use(s)

There is no information on uses other than those listed in subsection 1.2.

PETG MATERIAL SAFETY DATA SHEET

SECTION 8: Exposure control/personal protective equipment

8.1. Control parameters

No occupational concentrations are specified for the components of the mixture. Legal basis: (Journal of Laws 2014, item. 817 with the late. d.). Consolidated text: (Journal of Laws 2018, item 11. 1286).

8.2. Exposure control

Observe general health and safety rules. During work do not eat, drink or smoke. Wash your hands thoroughly before and after the end of work.

Hand and body protection: Not required.

Eye protection: Use tight safety glasses if the risk assessment indicates that it is necessary.

Respiratory protection: Not required.

In emergency situations, appropriate respiratory protection equipment shall be used when exposed to high concentrations of fumes arising from the printing process.

Personal protective equipment used must comply with the requirements of the MC Regulation

of 21 December 2005. (Journal of Laws No. 259, item. 2173) and Regulation 20 16/425/EU (as amended). d.). The

employer is obliged to provide security measures appropriate to the activities carried out and to

meet all quality requirements, including their maintenance and cleaning.

Environmental exposure control

Large quantities of the product should not be allowed to enter groundwater, sewerage, waste water or soil.



SECTION 9: Physical and chemical properties

9.1 Information on the basic physical and chemical properties of the

state of focus/form: solid/filament
Colour: by assortment

Smell:

odour threshold:

pH value:

melting/freezing point:

initial boiling point:

flash point:

no smell

not marked

not applicable

not marked

not marked

not marked

not applicable,

the product is not combustible

pairing speed: not applicable flammability (solid, gas): is not combustible

upper/lower explosive limit: not marked vapour pressure: not applicable density of pairs: not applicable Density: not marked

Solubility: does not dissolve in water

partition coefficient: n-octanol/water not marked self-ignition temperature: not marked decomposition temperature: not marked explosive properties: not marked oxidising properties: not marked viscosity: not applicable

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. See SECTION 10.3.

10.2. Chemical stability

Stable under recommended storage conditions. See SECTION 7.2.

10.3. Possibility of dangerous reactions

Dangerous reactions under the conditions of recommended use are not known.

10.4. Conditions to be avoided

Temperatures above 230°C. Electrostatic oil. Work with the product inthe ventilated rooms. The temperatures above the thermal temperature of the masterbatch adu.

10.5. Materials not compatible

compliant oxidants and strong principles.

10.6. Hazardous decomposition products

Combustion produces aldehydes, carbon monoxide (CO) and carbon dioxide (CO $_2$)).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Acute toxicity: Based on the available data, the classification criteria are not met.
- Skin corrosion/irritation: Based on the available data, the classification criteria are not met.
- Serious eye damage/eye irritation: Based on the available data, classification criteria are not met.
- Respiratory or skin sensitisation: Based on the available data, the classification criteria are not met.
- Mutagenic effects on reproductive cells: Based on the available data, the classification criteria are not met.
- Carcinogenicity: Based on the available data, the classification criteria are not met.



- Reproductive toxicity: Based on the available data, the classification criteria are not met.
- arget organ toxicity: one-off exposure W with an intake of available classification criteria are not met.
- Target organ toxicity t repeated exposure:
 Based on available classification criteria are not met.
- Aspirational hazard: Based on the available data, the classification criteria are not met.

SECTION 12: Environmental information

12.1. Toxicity

Effects on living organisms: No data available

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulation capability

Product incapable of bioaccumulation.

12.4. Mobility in soil

No data available.

12.5. Results of the evaluation of PBT and vPvB properties

According to the results of the evaluation, the substance is not PBT or vPvB, the mixture does not contain any substances evaluated as PBT or vPvB or no

12.6. Other harmful effects

The product does not affect global warming.

chemical safety report (CSR) is required.

SECTION 13: Waste management

13.1. Waste disposal methods

The waste material should be stored at a designated place for reprocessing or destruction.



The waste product must be recovered or disposed of in authorised incineration plants or waste disposal facilities in accordance with the provisions in force.

EU legislation: Directives of the European Parliament and of the Council: 2008/98/EC and 94/62/EC.

National legislation: (Journal of Laws 2013, item 11. 21 with late. d.). Consolidated text: (Journal of Laws 2018, item 11. 21). (Journal of Laws 2013, item. 888 with the late. d.). Consolidated text: (Journal of Laws 2018, item 11. 150).

SECTION 14: Transport information

14.1 UN number -

Not applicable, product not classified as dangerous during transport.

- **14.2 Correct UN shipping name** Not applicable.
- 14.3 Transport hazard class(s) Not applicable.
- **14.4 Packing group** Not applicable.
- 14.5 Environmental hazards Not applicable.
- **14.6 Special precautions for users** Not applicable.
- 14.7 Bulk transport in accordance with Annex II to MARPOL and the IBC Not applicable.

SECTION 15: Legal information

15.1. Safety, health and environmental legislation specific to a substance or mixture

Act of 25 February 2011 on chemical substances and mixtures thereof (OJ L 133, 25.7.2011, p. 1). No. 63, item. 322 with the late. d.). Consolidated text: (Journal of Laws 2018 item. 143).

Regulation of the Minister

of Labour and Social Policy of 6 June 2014 on maximum concentrations and instability of factors harmful to health in the working environment (Journal of Laws 2014, item 817, as amended). d.). Uniform text: (Journal of Laws 2018 item. 1286).

Waste Act of 14 December 2012 (Journal of Laws 2013, item 21 with late. d.). Consolidated text: (Journal of Laws 2018, item 11. 21).

Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws 2013, item 888, as amended). Consolidated text: (Journal of Laws 2018, item 150).

PETG MATERIAL SAFETY DATA SHEET

Regulation of the Minister of the Environment of 9 December 2014 on the waste catalogue (Journal of Laws 2014, item 1923). Regulation of the Minister of Economy of 21 December 2005 on the essential requirements for personal protective equipment (Journal of Laws No 259, item 2173).

Regulation of the Minister of Health of 2 February 2011 on the testing and measurement of factors harmful to health in the working environment (Journal of Laws No 33, item 166).

European ADR agreement on the international carriage of dangerous goods by road.

1907/2006/EC Regulation on the registration, evaluation, authorisation and application of chemical restrictions (REACH), the establishment of the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulations (EEC) No 793/93 and No 1488/94, as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, together with the D.

1272/2008/EC Regulation of the European Parliament and of the Council of 16 December 2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006 together with the other. D.

2015/830/EU Commission Regulation of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the registration, evaluation, authorisation and restrictions on chemicals (REACH).

2008/98/EC Directive of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste.

2016/425/EU Regulation of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and the repeal of Council Directive 89/686/EEC.

15.2. Chemical safety assessment

The product is not classified as harmful in accordance with EU Regulation 1272/2008 and Directive 67/548EEC. A chemical safety assessment (CSA) is not available for the described substances or ingredients until the last update date.

PETG MATERIAL SAFETY DATA SHEET

SECTION 16: Other information

Training

Before working with the product, you should familiarize yourself with the health and safety policy at the workplace where you will be using the product.

References to key literature and data sources

The card was developed on the basis of data provided by the manufacturer, literature data, online databases and knowledge and experience, taking into account the current legal provisions.

Do not use the product for medical use. Document prepared by:

NEBULA FILAMENTS

Ryszard Bieda