

3D FILAMENT PET-G Standard date of issue: 11.12.2018 date of update: 14.02.2022

**PRODUCT NAME:** 3D FILAMENT PET-G Standard

**PRODUCT DESCRIPTION:** 

PET-G Standard filament - poly(ethylene terephthalate) with addition of glycol in the form of a thread, designed for 3D printing using the FFF/FDM method. Filament coiled on spools, vacuum-packed with desiccant in a PET/PE bag, and then in a box.

# SECTION 1: Product and Company identification

Product name:	FILAMENT 3D PET-G Standard
Trade name:	FILAMENT 3D PET-G Standard 1,75 mm
	FILAMENT 3D PET-G Standard 2,85 mm

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

Identified uses:

Thermal processing of 3D printing

**1.3 Details of the supplier of the safety data sheet** 

Supplier:

ROSA PLAST Sp. z o.o. 05-074 Hipolitów, Polska ul. Hipolitowska 102 tel: +48 783 62 62

Email address of the person responsible for this safety datasheet: t.kalynczak@rosaplast.pl

### SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

### 2.2 Label elements

Markings according to EC guidelines: According to the method of calculating the "General Classification Guideline for the Production of the EC" in the latest valid version, the product does not require labelling.

The normal safety measures for handling chemicals should be observed.



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#### 2.3 Other hazards

The hazards of this product are associated mainly with its processing. Molten polymer will produce thermal burns. Polymer dust may represent a fire hazard at sufficient concentrations in presence of ignition sources.

### SECTION 3: Composition/information on ingredients

PETG (co-polyester) - > 99% CAS 26780-49-4 Pigment - < 1%

### **SECTION 4: First aid measures**

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Call a physician immediately.

**Skin contact:** Rinse immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician Cool skin rapidly with cold water after contact with hot product. Do not peel filament from the skin. Consult a physician.

Inhalation: Move to fresh air. Call a physician immediately.

**Ingestion:** Drink water as a precaution. Never give anything by mouth to an unconscious person Do not induce vomiting without medical advice Call a physician immediately.

Notes to physician: Treat symptomatically.

### **SECTION 5: Firefighting measures**

Suitable extinguishing media: Foam, Water, Carbon dioxide (CO<sub>2</sub>), Dry chemical.

Unsuitable extinguishing media None

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus, and full protective gear

**Under fire conditions:** Risks of ignition (followed by flame propagation or secondary explosions) shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

### SECTION 6: Accidental release measures

**Personal precautions:** See Section 8. Keep away from sources of ignition. Avoid dust formation. Avoid contact with skin and eyes.



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**Environmental precautions:** Do not flush into surface and ground and ground water or sanitary sewer system.

Methods for cleaning up: Shovel into suitable container for disposal.

### SECTION 7: Handling and storage

**Safe handling advice:** Avoid contact with skin and eyes. Employees should be protected from the possibility of contact with the molten filament during printing. Use personal protective equipment if necessary. In the process of printing, gases and vapors may be generated which may irritate the respiratory system, eyes and skin. It should be processed in a well-ventilated room.

**Storage:** Store in a cool place. Protect from sunlight. Store in a dry place.

Precautions: No special precautions required.

### SECTION 8: Exposure controls/personal protection

#### **Exposure Control:**

**Engineering measures:** Where possible, local exhaust ventilation and good general room ventilation should be used. Provide adequate exhaust ventilation in places of dust formation. **Exposure limits:** None established. This material can generate Particulates Not Otherwise Classifiable (PNOC).

### General safety and hygiene:

- Keep away from foodstuffs, beverages, and food.
- Do not eat, drink, smoke.
- Do not breathe dust / smoke.
- Avoid contact with eyes and skin.
- Wash hands before breaks and after work.

### **Breathing equipment:**

• It is not required under normal conditions of use. In the case of loose dust / fumes use a breathing apparatus.

#### Protection of hands:

• To operate a hot product, heat resistant gloves.

#### Eye protection:

- Protection glasses
- **Body protection:**
- For transport, hot, molten product heat-resistant protective clothing.



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### SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Wire
Odour	Slight
рН	Not applicable
Boiling Point	Not available
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Non-flammable
Vapour pressure	Not available
Vapour density	Not available
Relative density	≥1,27 g/cm³
Solubility(ies)	Insoluble in water

### SECTION 10: Stability and reactivity

**Reactivity** No specific test data related to reactivity available for this product or its ingredients. **Chemical stability** The product is stable.

**Possibility of hazardous reactions** Under normal conditions of storage and use, hazardous reactions will not occur. **Conditions to avoid** No specific data.

**Incompatible materials** Acetic Anhydride, acetone, aniline, benzene, chloroform, chromic acid, cyclohexanone, dimethylformamide, dioxane, ethyl acetate, phenol, tetrahydrofuran. Reactive with strong oxidizing agents, as well as strong acids and caustic will decompose polyester.

Hazardous decomposition products Carbon monoxide, carbon dioxide, acetaldehyde.

### SECTION 11: Toxicological information

### Information on the likely routes of exposure

**Inhalation** Combustion products may be irritant; High concentration of dust may be irritant to the respiratory tract.

**Ingestion** Expected to be a low ingestion hazard.

**Skin contact** May cause physical abrasion in contact with skin. Molten polymer will adhere to the skin causing deep thermal burns.

Eye contact May cause physical abrasion in contact with eyes.

#### Information on toxicological effects

#### Potential acute health effects

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.



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#### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	No specific data.
Ingestion	No specific data.
Skin contact	No specific data.
Eye contact	No specific data.

# Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.
Long term exposure	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

### **SECTION 12: Ecological information**

Toxicity Persistence and degradability Bioaccumulative potential Mobility in soil	Not available. Not available. Not available.
Soil/water partition coefficient (KOC) Mobility	Insoluble in water Not available.
Results of PBT and vPvB assessment	
PBT vPvB	Not available. Not available.
Other adverse effects	No known significant effects or critical hazards.



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### **SECTION 13: Disposal considerations**

### Waste treatment methods

#### **Product**

**Methods of disposal** Like most thermoplastics, the product can be recycled. Can be landfilled or incinerated, when in compliance with local regulations.

**Hazardous waste** Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

#### **Packaging**

**Methods of disposal** The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. **Special precautions** This material and its container must be disposed of in a safe way.

### **SECTION 14: Transport information**

The substance is not subject to transport regulations on hazardous goods included in ADR (road transport), RID (rail transport), IMDG (marine transport) and ICAO/IATA (air transport).

### **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV List of Substances of Very High Concern for Authorization: None of the components are listed.

Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: None of the components are listed.

Chemical Safety Assessment: Not available

### **SECTION 16: Other information**

The information contained in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information provided is only intended as a guide to safe handling, use, processing, storage, transport, disposal and release, and no warranty or quality specification should be taken into account. The information applies only to a specific material and may not be relevant for such material used in combination with other materials or other processes, unless otherwise specified in the text. Although some hazards are described in this document, we cannot guarantee that these are the only hazards that exist.



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### COMPLIANCE WITH EUROPEAN UNION REGULATIONS FOR FOOD CONTACT PLASTICS

The raw material is compliant with the requirements for plastic materials used for articles or parts of articles intended to come into contact with food in accordance with the following European legislation:

- Regulation (EC) No. 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC.
- Commission Regulation (EU) No. 10/2011 until amendment 2020/1245 of 2 September 2020.
- Commission Regulation (EC) No. 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food.
- BfR Recommendations on Food Contact Materials for XVII Poly(terephthalic acid diol esters).
- Dutch Packaging and Consumer Articles Regulation, December 20th, 2016.

### Note for users:

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. ROSA PLAST Sp. z o.o. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

