

SAFETY DATA SHEET

by Commission Regulation (EC) No 830/2015 (REACH)

PRODUCT NAME: Fillamentum PETG HFFR

Revision date: 1. 11. 2024 / 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Identification of the substance / preparation

Product name: Fillamentum PETG HFFR

1.2 Application

Use of the substance or mixture: Filaments for 3D printing

Recommended restrictions on use: Designed for professional / industrial use.

1.3 Manufacturer / Supplier:

Company: Fillamentum Manufacturing Czech s.r.o.

Address: nám. Míru 1217

768 24 Hulín

Czech Republic

ID: 29233275

Website: www.fillamentum.com

Telephone: +420 720 060 947

E-mail: helpdesk@fillamentum.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification

Due to the inclusion of the active ingredient(s) in a polymeric matrix that totally encapsulates them, it is anticipated that they should not present a hazard in the form in which they are delivered.

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

2.2 Label elements

Not applicable.

2.3 Other hazards

According to Annex XIII, the substance does not meet PBT or vPvB criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

None.

3.2 Mixture

Chemical description: polymer matrix - co-polyester

Components: None of the substances contained in the mixture are above the limits specified in Annex II of Regulation (EC) No 1907/2006.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Specific medical treatment is urgent. Move victim to fresh air. Give artificial respiration in case the victim is not breathing.

Skin contact: Contaminated clothing and shoes must be removed. In the case of contact with hot material, quickly cool the molten material with water and call a physician for removing of adhering material and treatment of burn.

Eye contact: Immediately flush eyes with water for at least 15 minutes in the case of contact with molten material. Seek medical attention if eye symptoms occur.

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Ingestion: Rinse mouth. Get medical attention.

4.2 Most information symptoms and affects, both acute and delay

Acute effects Not classified.

Delayed effects Not classified.

4.3 Indication of any immediate medical attention and special treatment needed

Call emergency medical service. Seek medical help if needed.

Ensure that medical personnel are aware of the material involved and protect themselves.

In case of burn by molten material, cool quickly with plenty of water. Seek the physician for treatment of burns.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Product is non-flammable, with a low risk of fire due to the flammability characteristics of the product in normal conditions of storage, handling and use.

Suitable extinguishing media: Water, sand, carbon dioxide (CO₂).

Unsuitable extinguishing media: Non-applicable

5.2 Special hazards arising from the substance or mixture

Due to its inflammable nature, the product does not present a fire risk under normal storage, handling and use conditions.

5.3 Advice for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA).

Structural fire fighters' protective clothing will only provide limited protection.

5.4 Sensitivity to static discharge

Not available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Stop leak if you can do it without risk.

Isolate exposed area.

Keep unauthorized personnel away.

Use certificated protective equipment.

Ventilate the leaked area.

6.2 Environmental precautions

This product is not classified as hazardous to the environment.

Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

Do not touch or walk through spilled material.

6.4 Reference to other sections

See also Sections 8 and 13 of this Safety Data Sheet.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid prolonged or repeated contact with skin. Avoid contact with molten material.

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures.

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products.

It is not necessary to take special measures to prevent environmental risks. For more information see subsection 6.2

Do not unpack the product if not immediately used.

7.2 Conditions for safe storage, including any incompatibilities

Keep the package well closed and dry.

Protect from moisture, water.

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

Keep away from waterways and sewers.

Keep away from any source of ignition.

Storage temperature: < 40 °C

7.3 Specific end uses

Except for the instructions already specified, it is unnecessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Specific exposure limits have not been established or are not applicable unless listed below. Due to the inclusion of the active ingredient(s) in a polymeric matrix that totally encapsulates them, it is anticipated that they should not present a hazard in the form in which they are delivered.

- EU Regulation: Not available.
- US (NIOSH/OSHA ACGIH):
 - NIOSH- TWA: Not applicable
 - OSHA- TWA: Not applicable
 - ACGIH- TWA: Not applicable
- Regulation in Korean: Not applicable
- Biological Exposure Index: Not applicable

8.2 Exposure controls

Provide local exhaust ventilation system or other engineering controls to keep the airborne below their respective threshold limit value.

Check legal suitability of exposure level.

8.3 Personal Protection

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding CE in accordance with Regulation (EU) 2016/425. All information contained herein is a recommendation that needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

Respiratory Protection	Wear European Standards EN 149 or NIOSH approved full or half face piece (with goggles) respiratory protective equipment when necessary.
Eye Protection	An eye wash unit and safety shower station should be available nearby workplace. Wear safety glasses to protect eyes from scattering toxic substance.
Skin Protection	When material is heated, wear gloves to protect against thermal burns.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical Appearance:	Solid, natural filament
Odour:	Slight odour
pH:	Not applicable
Melting/freezing point:	Not applicable
Boiling point/boiling range:	Not applicable
Flash point:	Not available
Flammability	Not available
Evaporation rate:	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapor density:	Not available
Solubility:	
Water solubility:	Negligible
Density:	1,26 g/ml (25 °C)
Specific gravity:	> 1
Partition Coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	> 250 °C
Viscosity:	Not available

9.2 Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid

Avoid release to the environment.

10.5 Incompatible materials

Avoid alkalis or strong bases.

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10.6 Hazardous decomposition products

See subsections 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	LD50 oral > 2000 mg/kg (rat).
Skin corrosion/irritation:	Molten material will produce thermal burns.
Serious eye damage/irritation:	Molten material will produce thermal burns.
Respiratory or skin sensitisation:	Due to the inclusion of the active ingredient(s) in a polymeric matrix that totally encapsulates them, it is anticipated that they should not present a hazard in the form in which they are delivered.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Mutagenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
Sensitizing effects:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine-disrupting properties: The product fails to meet the criteria.

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available.

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

Product fails to meet PBT/vPvB criteria.

12.6 Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects

Not available.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste class (Regulation (EU) No 1357/2014): It is not possible to assign a specific code, as it depends on the intended use by the user.

Waste management (disposal and evaluation): Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue.

Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated.

SECTION 14: TRANSPORT INFORMATION

According to: ADR, RID, AND, IMDG, IATA/ICAO.

14.1 UN number

Not regulated.

14.2 UN proper shipping name

Not dangerous goods.

14.3 Transport hazard class

Not regulated.

14.4 Packing group

Not regulated.

14.5 Environmental hazards

Not applicable.

14.6 Special precaution for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulatory Information

Candidate substances for authorization under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialization and the use of certain dangerous substances and mixtures (Annex XVII REACH): Non-applicable

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15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

The information is published in the best knowledge and information of the company. The final usage of the product must be assessed by the user. The company is not responsible for any risks caused by incorrect handling or processing.