

# SAFETY DATA SHEET

THE FILAMENT PETG CF | English back-translation of a Danish translation of the manufacturer's English SDS (version 1.0/EN, issued 16 October 2024). This document is not the manufacturer-issued English original and has not been independently approved by Spectrum Group.

According to the criteria of Regulation (EC) No 1907/2006 (REACH), as amended.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier Filament The Filament PETG CF.

1.2 Relevant identified uses and uses advised against Identified use: Filament for use in 3D printers. Uses advised against: Not determined.

1.3 Details of the supplier Responsible company: Spectrum Group Sp. z o.o. | Address: Parkowa 85, 05-806 Pęcice, Poland | Telephone: +48 608 109 008 | Email of SDS contact: office@spectrumfilaments.com.

1.4 Emergency telephone number 112.

## SECTION 2: Hazards identification

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

2.2 Label elements Hazard pictograms and signal word: None. Names of substances on label: None. Hazard statements: None. Precautionary statements: None.

2.3 Other hazards The substances in the product do not meet the PBT or vPvB criteria of Annex XIII to REACH. The product does not contain substances included on the list established under Article 59(1) due to endocrine-disrupting properties, or identified as endocrine disruptors according to the criteria of Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, at concentrations of 0.1% by weight or higher.

## SECTION 3: Composition/information on ingredients

3.1 Substances Not applicable.

3.2 Mixtures The product does not contain components classified as hazardous. The product does not contain components with EU occupational exposure limit values.

## SECTION 4: First aid measures

4.1 Description of first aid measures Skin contact – filament: Wash affected skin with soap and water. During printing: Thermal burns may occur. Rinse injured skin with water, apply a sterile dressing and seek medical advice. Eye contact – filament: Protect the unaffected eye, remove contact lenses and rinse the affected eye with water for 10–15 minutes. Avoid a strong water jet due to risk of corneal damage. Consult an ophthalmologist. During printing: Splashes of molten filament may cause burns. Apply a sterile dressing and immediately consult an ophthalmologist.

Ingestion: Exposure by this route does not normally occur. If swallowed, rinse mouth with water. Do not induce vomiting. Seek medical advice and show the packaging or label.

Inhalation – filament: Exposure by this route does not occur. During printing: Move the affected person to fresh air. Keep warm and at rest. Seek medical advice if troublesome symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed No significant effects or critical hazards have been reported under normal conditions of use. Prolonged inhalation of vapours/fumes from the printing process may cause headache, difficulty concentrating and fatigue.

4.3 Indication of immediate medical attention and special treatment needed The physician determines further treatment after thorough examination of the injured person. Symptomatic treatment.

## SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable: Dry powder, foam, water mist and carbon dioxide. Unsuitable: Strong water jet, as it may spread the fire.

5.2 Special hazards arising from the substance or mixture Combustion may generate harmful smoke containing carbon oxides and other harmful thermal decomposition products. Do not inhale combustion products, as they may be harmful to health.

5.3 Advice for firefighters Use standard personal protection for firefighting. Do not enter the fire area without self-contained breathing apparatus and chemical-resistant protective clothing. Prevent firefighting water from entering sewers, surface water or groundwater. Collect used extinguishing media.

## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Follow good occupational hygiene and safety practices. Ensure that clean-up after the incident is carried out only by qualified personnel. Provide adequate ventilation. Avoid inhaling vapours/fumes from the printing process.

6.2 Environmental precautions In the event of release of large quantities, take appropriate measures to prevent dispersion into the environment.

6.3 Methods and material for containment and cleaning up Collect mechanically. Collected material should be recycled or treated as waste.

6.4 Reference to other sections Waste handling: Section 13. Personal protective equipment: Section 8.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling Follow good occupational hygiene and safety practices. Use the product only for its intended purpose. Rubbing or friction may lead to an accumulation of electrostatic charge on the filament surface. The charge may be transferred to the user and constitute an ignition source. Exercise particular care when working with flammable materials.

7.2 Conditions for safe storage, including any incompatibilities Store filament in a cool, dry place protected from weather conditions such as direct sunlight, frost and precipitation. Protect from ignition sources and open flames. Do not store with incompatible materials (see Section 10.5).

7.3 Specific end use(s) No information on uses other than those specified in Section 1.2.

## SECTION 8: Exposure controls/personal protection

8.1 Control parameters The product contains no components with occupational exposure limits established at EU level. Legal basis: Directives 91/322/EEC, 98/24/EC, 2000/39/EC and 2004/37/EC, as amended. Also check any national limit values.

8.2 Exposure controls Engineering measures: Follow good occupational hygiene and safety practices. Do not eat, drink or smoke during use. Wash hands thoroughly before breaks and after work.

Personal protective equipment: The need for and selection of PPE must be based on product risks, workplace conditions and handling. PPE must comply with Regulation (EU) 2016/425 and relevant standards.

Hands and body: Wear protective gloves and protective clothing if required by risk assessment (EN 374). Glove material should be selected individually at the workplace.

Eyes: Wear close-fitting safety goggles if required by risk assessment (EN 166).

Respiratory protection: Normally not required. In emergencies involving high concentrations of vapours/fumes from printing, suitable respiratory protection must be worn.

Thermal hazards: Where contact with hot product is expected, wear heat-resistant gloves according to EN 407.

Environmental exposure: Avoid release of large quantities into groundwater, sewers or soil.

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Physical state: Solid/filament.

Colour: Black.

Odour: Odourless.

Melting point/freezing point: Not determined.

Boiling point or initial boiling point and boiling range: Not determined.

Flammability: The product is not classified for flammability.

Lower and upper explosion limits: Not applicable.

Flash point: Not determined.

Auto-ignition temperature: Not determined.

Decomposition temperature: Not determined.

pH: Not determined.

Kinematic viscosity: Not applicable.

Solubility: Not determined.

Partition coefficient n-octanol/water (log value): Not applicable.

Vapour pressure: Not determined.

Density and/or relative density: Not determined.

Relative vapour density: Not determined.

Particle characteristics: Not determined.

9.2 Other information No additional test results.

## SECTION 10: Stability and reactivity

10.1 Reactivity The product is resistant to chemicals. See also Sections 10.3–10.5.

10.2 Chemical stability Stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions None known.

10.4 Conditions to avoid Protect from direct sunlight, moisture, ignition sources and heat, except for processes directly associated with the intended use.

10.5 Incompatible materials Strong bases and strong acids.

10.6 Hazardous decomposition products None known.

## SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity: Based on available data, classification criteria are not met.

Skin corrosion/irritation: Based on available data, classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, classification criteria are not met.

Germ cell mutagenicity: Based on available data, classification criteria are not met.

Carcinogenicity: Based on available data, classification criteria are not met.

Reproductive toxicity: Based on available data, classification criteria are not met.

Specific target organ toxicity – single exposure: Based on available data, classification criteria are not met.

Specific target organ toxicity – repeated exposure: Based on available data, classification criteria are not met.

Aspiration hazard: Based on available data, classification criteria are not met.

Likely routes of exposure: Skin contact, eye contact and inhalation. See Section 4.2 for additional information on effects.

Symptoms related to physical, chemical and toxicological characteristics: Vapours from hot product may irritate eyes. Contact with hot product may cause skin burns.

Delayed and immediate effects and chronic effects from short- and long-term exposure: No data.

11.2 Information on other hazards Endocrine-disrupting properties: The product does not contain substances listed under Article 59(1) or identified as endocrine disruptors under Regulation (EU) 2017/2100 or (EU) 2018/605 at concentrations of at least 0.1% by weight. Other information: None known.

## **SECTION 12: Ecological information**

12.1 Toxicity The product is not classified as hazardous to the environment.

12.2 Persistence and degradability No data.

12.3 Bioaccumulative potential No data.

12.4 Mobility in soil The product is not mobile in soil.

12.5 Results of PBT and vPvB assessment The product does not contain components meeting the PBT or vPvB criteria of Annex XIII to REACH.

12.6 Endocrine-disrupting properties The product does not contain substances listed under Article 59(1) or identified as endocrine disruptors under Regulation (EU) 2017/2100 or (EU) 2018/605 at concentrations of at least 0.1% by weight.

12.7 Other adverse effects The product has no impact on global warming or depletion of the ozone layer. Consider other possible environmentally harmful effects of individual mixture components (e.g. global warming potential).

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods Store waste in a designated place for recycling or recovery. Product waste should be recovered or disposed of at approved incineration or waste facilities in accordance with local regulations. Legal basis: Directives 2008/98/EC and 94/62/EC, as amended.

## **SECTION 14: Transport information**

14.1 UN number or ID number Not applicable. The product is not classified as dangerous goods for transport.

14.2 UN proper shipping name Not applicable.

14.3 Transport hazard class(es) Not applicable.

14.4 Packing group Not applicable.

14.5 Environmental hazards Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Maritime transport in bulk according to IMO instruments Not applicable.

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2004/37/EC on protection of workers from risks related to exposure to carcinogens or mutagens at work, as amended.

Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values in implementation of Directive 98/24/EC, as amended.

Council Directive 98/24/EC on protection of the health and safety of workers from risks related to chemical agents at work, as amended.

Commission Directive 91/322/EEC on indicative limit values in implementation of Directive 80/1107/EEC, as amended.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IMDG Code: International Maritime Dangerous Goods Code.

IATA Dangerous Goods Regulations.

Regulation (EC) No 1907/2006 concerning Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP), as amended.

Commission Regulation (EU) 2020/878 amending Annex II to REACH.

Directive 2008/98/EC on waste, as amended.

Directive 94/62/EC on packaging and packaging waste, as amended.

Regulation (EU) 2016/425 on personal protective equipment and repealing Directive 89/686/EEC.

15.2 Chemical safety assessment It is not necessary to perform a chemical safety assessment of the mixture.

## SECTION 16: Other information

Abbreviations PBT: Persistent, bioaccumulative and toxic substance. vPvB: Very persistent and very bioaccumulative substance.

Training Before beginning work with the product, users should familiarise themselves with the health and safety rules for handling chemicals and, in particular, complete relevant workplace training.

Classification method Classification is based on the calculation method using data on hazardous substances under Regulation (EC) No 1272/2008 (CLP), as amended.

Key literature references and sources of data The data sheet was prepared based on manufacturer information, literature data, online databases and the manufacturer's knowledge and experience, taking applicable legislation into account.

Other information Issue date: 16 October 2024. Original version: 1.0/EN.

The information is based on currently available product data and the manufacturer's experience and knowledge. It is neither a quality description nor a guarantee of specific properties. It should be considered an aid to safe transport, storage and use. This does not release the user from responsibility for incorrect use of the information or failure to comply with applicable legislation.

Translation note: This English document has been translated from a Danish translation of the manufacturer's English SDS. It has not been independently verified or issued by Spectrum Group. For authoritative wording, consult the manufacturer's original English SDS.