Safety Data Sheet of **Fiberlogy PET-G ESD** according to Regulation (EC) No. 1907/2006 (REACH) and EU Regulation 2020/878.

Update: 27.03.2025 r.

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

1.1. PRODUCT IDENTIFIER

Fiberlogy PET-G ESD

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Application:	Filament used for 3D printing
Uses advised against:	Undefined

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Fiberlab S.A.
Brzezie 387,
32-014 Brzezie,
Poland
datasheets@fiberlab.com

1.4. EMERGENCY TELEPHONE NUMBER

112 (Europe)

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

According to the Regulation (EC) no. 1272/2008 (CLP): Product is not classified as hazardous.

2.2. LABEL ELEMENTS

Hazard pictograms and signal word:	None
Dangerous components placed on the label:	None
Hazard statements:	None
Precautionary statements:	None
According to the Regulation (EC) no. 1272/2008 (CLP):	According to European and national laws, the product does not require labeling.

2.3. OTHER HAZARDS

According to Regulation (EC) No. 1272/2008 (CLP): No specific hazards are known if regulations/recommendations for storage and handling are followed. Dust generation should be avoided as it may cause slight irritation to the eyes, skin and respiratory system.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

Not applicable

3.2. MIXTURES

Substance name	CAS no.	No. EC / ECHA list	PCT (wt%)	Classification according to Regulation (EC) No 1272/2008 (CLP)	
				Hazard classes and category codes	Hazard statement codes
Polyethylene terephthalate glycol	-	-	>95	-	-
Carbon nanotubes [MWCNT] / Synthetic graphite	-	- / 936-414-1	<5	-	-

Any substances contained in the mixture do not meet the criteria specified in Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP), which mandate their inclusion in the safety data sheet.

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

Inhalation: Move affected person to fresh air. Get a medical assistance immediately.

Skin contact: Immediately rinse with plenty of water after contact with molten polymer for at least 15 minutes. If skin irritation continues, get medical assistance.

Eye contact: Immediately rinse eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Ingestion: Rinse mouth and then drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting, unless directed by medical personnel. Call a doctor immediately.

Information for medical: Treat symptomatically.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms: No significant body reactions to the product.

Threats: Risk of skin burns caused by molten material when handled improperly. Other than that, no risk is expected when used intentionally and handled properly.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Continuation of first aid measures. Treatment as recommended by the doctor.

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing agents: water spray, foam, dry powder, carbon dioxide.

Unsuitable extinguishing agents: direct stream of water.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of combustion: formation of carbon monoxide, carbon dioxide, metal oxides, toxic fumes and other decomposition products.

5.3. ADVICE FOR FIREFIGHTERS

Provide/wear protective breathing apparatus.

The degree of risk depends on the burning substance and fire conditions. In case of combustion, possible formation of toxic gases/vapors. Dispose of fire residues and contaminated extinguishing water according to applicable regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Keep away from ignition sources. Avoid contact with skin and eyes. Avoid inhalation of dust. Wear dust masks and safety goggles if necessary.

6.2. ENVIRONMENTAL PRECAUTIONS

It should not be released into the environment.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Sweep up and collect. Avoid dust generation. Provide proper ventilation. Dispose of absorbed material according to regulations.

6.4. REFERENCE TO OTHER SECTIONS

Information on exposure control/personal protective equipment and waste handling is available in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Use the product according to the intended use and the rules of occupational safety and health. Set up processing machinery in a room with good ventilation. Avoid formation and deposition of dust. Maintain good cleanliness standards to prevent dust accumulation.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Information on fire and explosion protection: General fire safety rules should be followed.
In case of dust formation: Take measures to prevent electrostatic charge.
Avoid all sources of ignition: heat, sparks, open flames.
Storage: Well closed/packed, cool and dry place. Protect from moisture, direct strong sunlight and high temperature. Avoid contamination with other substances. Avoid storage together with hazardous substances.

7.3. SPECIFIC END USE(S)

For the relevant identified uses listed in Section 1, follow the guidance listed in this section.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Derived No Effect Level (DNEL) for carbon nanotubes – Inhalation – long term exposure of workers: 0.05 mg/m^3

8.2. EXPOSURE CONTROLS

Personal protective equipment

Respiratory protection: respiratory protection if dusts are formed. particulate filter (type P1).

Hand protection: use additional gloves for protection against heat when working with hot molten material (EN 407).

Eye protection: safety goggles with side shields (frame goggles) (e.g. EN 166),

Body protection: Body protection must be selected depending on the activity and possible exposure, e.g. apron, safety boots, chemical protection suit.

General safety and hygiene measures: avoid contact between molten material and skin. Avoid inhalation of dusts/mists/vapours. Eye wash fountains and safety showers must be easily accessible. Follow industrial hygiene and safety rules.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Colour	By assortment
Odour	Odourless
Melting point / freezing point	No data
Boiling point	No data
Flammability	No data
Lower and upper explosion limit	No data
Flash point	No data
Auto-ignition temperature	No data
Decomposition temperature	No data
pH	Not applicable
Kinematic viscosity	No data
Solubility in water	Insoluble
Partition coefficient n-octanol/water (log value)	No data
Vapour pressure	Not applicable
Density and / or relative density	>1 g/cm^3
Relative vapour density	Not applicable
Particle characteristics	Product in the form of filament with an average diameter of 1.75mm

9.2. OTHER INFORMATION

9.2.1. Information with regard to physical hazard classes

Protection against contact with molten material during printing

9.2.2. Other safety characteristics

See section 8

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No reactions when stored and handled as recommended.

10.2. CHEMICAL STABILITY

The product is stable when stored and used as recommended.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

None, the product is stable when stored and used as directed/indicated.

10.4. CONDITIONS TO AVOID

Avoid temperatures above the decomposition temperature.

Protect from moisture.

Avoid direct exposure to sunlight.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizing and reducing agents.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

None, if the product is used as recommended. In case of fire, hazardous decomposition products (carbon monoxide, carbon dioxide, metal oxides, toxic fumes and other decomposition products) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

11.1.1. Acute toxicity:

Oral: No risk is expected from ingestion of small amounts. LD50 value in a single oral dose has not been determined. Typical LD50 values for this family of materials: LD50 >5000 mg/kg (carbon nanotubes).

Dermal: No adverse effects are expected from dermal absorption. LD50 value has not been determined. Typical LD50 value for this family of materials: LD50 >2000 mg/kg (carbon nanotubes).

11.1.2. Skin corrosion / irritation:

Not classified.

11.1.3. Serious eye damage / irritation:

Not classified.

11.1.4. Respiratory or skin sensitization:

Not classified.

11.1.5. Germ cell mutagenicity:

No effect.

11.1.6. Carcinogenicity:

No effect.

11.1.7. Reproductive toxicity:

No data.

11.1.8. STOT – single exposure:

Carbon nanotubes (in free form) - can be harmful if aspirated.

11.1.9. STOT – repeated exposure:

Substance	Exposure	Species, Target organ	Result
Carbon nanotubes	28 days, oral	rat	NOAEL: 0.5 mg/kg
Carbon nanotubes	5 days, inhalation	rat, lung (pulmonary inflammation)	LOAEC: 2 mg/m^3
Carbon nanotubes	90 days, inhalation	rat, lung (multifocal granulomatous inflammation)	LOAEC: 0.1 mg/m^3

11.1.10. Aspiration hazard:

Not classified.

11.2. INFORMATION ON OTHER HAZARDS

No data.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Do not allow the product to enter the sewage system, surface water or soil.

Substance	Study type	Result
Carbon nanotubes	Fish, 14 days	LC50: > 100 mg/l
Carbon nanotubes	Daphnia, 48 hours	EC50: > 100 mg/l
Carbon nanotubes	Algae, 72 hours	EC50: 134 mg/l

12.2. PERSISTENCE AND DEGRADABILITY

Not readily biodegradable.

12.3. BIOACCUMULATIVE POTENTIAL

No data.

12.4. MOBILITY IN SOIL

No data.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

Product does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. ENDOCRINE DISRUPTING PROPERTIES

No data.

12.7. OTHER ADVERSE EFFECTS

No data.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Disposal by recycling is recommended, while all national and local regulations must be followed.

SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous good according to transport regulations (ADR, RID, ADN, ICAO, IATA, IMDG, USA DOT, TDG).

14.1. UN NUMBER OR ID NUMBER

Not applicable.

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

Some selected:

2020/878/UE – Regulation of the European Commission of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

1907/2006/WE – Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a 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 Directives: 91/155/EEC; 93/67/EEC; 93/105/EC; 2000/21/EC and later changes.

1272/2008/WE – Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending Regulation EC 1907/2006.

15.2. CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment is not required for the mixture.

The SDS for this product is not legally required and is provided by us as a courtesy to our customers. The product is not classified as dangerous. A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

The data contained in this safety data sheet is based on our current knowledge and experience and describes the product only in relation to safety requirements.

Information provided based on reference materials submitted by raw material suppliers. To the knowledge of Fiberlab S.A., they are reliable. This data is for informational purposes only. Fiberlab S.A. makes no warranties and is not responsible for the processing of the material, which may affect the final properties of the product, which may differ from the values given in this document.