

Safety Data Sheet of **Fiberlogy ABS ESD** according to Regulation (EC) No. 1907/2006 (REACH), Regulation UE 878/2020 in the current version.

Update: 12 December 2024 r.

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1. PRODUCT IDENTIFIER

Fiberlogy ABS ESD

1.2. RELEVANT IDENTIFIED 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, Polska

1.4. EMERGENCY TELEPHONE NUMBER

112 (Europe)

2. HAZARDS IDENTYFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

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

2.2. LABEL ELEMENTS

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

Hazard pictograms and signal word:	None
Dangerous components placed on the label:	None
Hazard statements:	None
Precautionary statements:	None

2.3. OTHER HAZARDS

According to Regulation (EC) No. 1272/2008 (CLP): No specific cases known if there are specific storage and handling regulations/recommendations. How to identify the dust as it can be caused by slight irritation to the eyes, skin and respiratory system.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

3.2. MIXTURES

Substance name	CAS no.	No. EC/list ECHA	PCT (wt%)	Classification (WE) no 1272/2008 (CLP)
Akrylonitryl– Butadien- Styren copolymer	9003-56-9	-	>85%	-
Carbon fiber [MWCNT]	-	- / 936-414-1	<15%	-

4. FIRST AID MEASURES

4.1. DESCRIPTION OF THE FIRS AID MEASURES

Inhalation:	Move exposed person to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. Consult a physician after significant exposure.	
Skin contact:	Cool skin rapidly with cold water after contact with molten polymer. Do not peel polymer from the skin. Obtain medical attention	
Eye contact:	Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.	
Ingestion:	Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.	

Information for medical: Treat symptoms.

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

Symptoms:	No significant body reactions to the product.
Threats:	Risk of skin burns caused by hot melt if handled incorrectly. In addition,
	no hazards are anticipated with intended use and correct handling.

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

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

5. FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

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

Unsuitable extinguishing media: direct stream of water.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of combustion: formation of carbon monoxide, carbon dioxide, nitrogen oxides, organic 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, the formation of toxic gases/vapors is possible. Dispose of fire residues and contaminated extinguishing water in accordance with applicable regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Keep away from sources of ignition. Avoid contact with skin and eyes. Avoid breathing dust. Wear dust masks and safety glasses 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 raising dust. Provide adequate ventilation. Dispose of absorbed material in accordance with local regulations.

6.4. REFERENCE TO OTHER SECTIONS

Information on exposure controls/personal protection and disposal is available in the section 8 and 13.

7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Use the product in accordance with its intended use and the rules of occupational health and safety. Set up processing machines in a well-ventilated room. Avoid formation and deposition of dust. Follow the rules of occupational health and safety.

Measures to prevent the formation of aerosols and dust: maintain good standards of cleanliness to prevent dust accumulation.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

MATERIAL SAFETY DATA SHEET

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Information on fire and explosion protection: General fire safety rules should be followed.

In case of dust formation: Take measures to prevent electrostatic charging.

Avoid all sources of ignition: heat, sparks, open flames.

<u>Storage</u>: Well sealed/packaged, cool and dry place. Protect against moisture, direct strong sunlight and high temperature. Contamination with other substances should be avoided. Storage together with hazardous substances should be avoided.

7.3. SPECIFIC END USE(S)

For the relevant identified uses listed in section 1, the guidance listed in this section should be followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

The product does not contain any significant amounts of materials with occupational exposure limits

8.2. EXPOSURE CONTROLS

Personal protective equipment:

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

Hand protection : wear additional heat protection gloves when working with hot molten masses (EN 407).

Eye protection: safety glasses 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 of the molten material with the skin. Avoid inhalation of dusts/mists/vapours. Eyewash fountains and safety showers must be easily accessible. Follow industrial hygiene and safety rules.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

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Physical state	Solid
Colour	By assortment
Odour	Specific
Melting point / freezing point	>90°C
Boiling point	No data
Flammability	No data
Lower and upper explosion limit	No data
Flash point	No data
Auto-ignition temperature	>400°C
Decompositin temperature	~300°C
рН	No data
Kinematic viscosity	No data
Solubility	Insoluble
Vapour pressure	No data
Density and / or relative density	~1,00 g/cm ³
Relative vapour density	No data
Particle characteristics	Filament shape

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

10. STABILITY AND REACTIVITY

10.1. REACTIVITY

No response when stored and handled as directed.

10.2. CHEMICAL STABILITY

The product is stable when stored and used as directed.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

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

10.4. CONDITIONS TO AVOID

Avoid all sources of ignition: heat, sparks, open flames. Protect against moisture, chloride and oxidizing acids. Protect from temperatures above the decomposition temperature (300°C),

10.5. INCOMPATIBLE MATERIALS



Strong oxidants.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating.

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity:

	Droga narażenia	LD ₅₀ – average lethal dose
MWCNT (carbon fiber)	oral	>5000mg/kg
MWCNT (carbon fiber)	Skin contact	>2000mg/kg

Skin Corrosion / irritation:

Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions material is heated to elevated temperatures thus contact with the molten material may cause thermal burns.

Serious eye damage / irritation:

Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

Respiratory or skin sensitization:

No data / not classified

Germ cell mutagenicity:

Product: not classified

N,N'-ethylenedi(stearamide) : In vitro / audio, Source: IUCLID

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

Carcinogenicity:



No data

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Reproductive toxicity:

No data / not classified

STOT – single exposure:

The substance or mixture is not classified as specific target organ toxicant, single exposure

STOT – repeated exposure:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure

Aspiration hazard:

Based on physical properties, not likely to be an aspiration hazard

11.2. INFORMATION ON OTHER HAZARDS:

Product dust may be irritating to the eyes, skin and respiratory system. Resin particles, like other inert materials, cause mechanical irritation to the eyes. Ingestion may irritate the digestive system, cause nausea, vomiting and diarrhea.

11.2.1. Endocrine disrupting properties:

The substance/ mixture does not contain components considered to have endocrine disrupting properties according to REACH article 57(f) or Commision Delegated erguation (EU) 2017/21000 or Commision Regulation (EU) 2017/605 at levels of 0,1% or higher

12. ECOLOGICAL INFORMATION

12.1. TOXICITY

Do not allow the product to enter the sewage system, surface water or soil. Small particles can physically affect aquatic and terrestrial organisms. Toxicity to fish: not expected to be acutely toxic.

12.2. PERSISTENCE AND DEGRADIBILITY

This water – insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

12.3. BIOAKUMULATIVE POTENTIAL

No bioconcentration is expected because of the relatively high molecular weight.



12.4. MOBILITY IN SOIL

In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

Product does not contain ingredients, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation at levels 0.1% or higher.

12.6. ENDOCRINE DISRUPTING PROPERTIES

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

12.7. OTHER ADVERSE EFFECTS

No data.

13. DISPOSTAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Recycling is recommended and all national and local regulations must be followed.

14. TRANSPORT INFORMATION

Not classified as dangerous goods according to transport regulations (ADR RID, ADN, IMDG).

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.

15. REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISTATIONS 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.

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 on the basis of reference materials provided by raw material suppliers. According to the knowledge of Fiberlab S.A. they are reliable. These data are informative. Fiberlab S.A. does not provide any guarantees 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.