Safety Data Sheet of **Fiberlogy PEI 9085** according to Regulation (EC) No. 1907/2006 (REACH), Regulation UE 878/2020 in the current version.

Update: 21 February 2024 r.

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND THE COMPANY

1.1. PRODUCT IDENTIFIER

Fiberlogy PEI 9085

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

+48 731 400 201

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 are 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. Molten polymer will produce thermal burns.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

3.2. MIXTURES

Substance name	Cas. No.	Classification	PCT (wt. %)
Polyetherimide	61128-46-9	No data available	>99
Pigments/ Carbon Black	1333-86-4	No data available	< 0,3

Components which are considered potential hazards to health or the environment, if present above minimum concentrations, are listed above. Any concentration shown as a range is to protect confidentiality and/or is due to batch variation. Any non-hazardous components are being withheld as a trade secret. This product consists primarily of high molecular weight polymers which are not expected to be hazardous. Furthermore, any additives in this product are present within the polymer matrix and are not expected to be hazardous under recommended use conditions. Occupational exposure limits, if available, are listed in Section 8

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

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

May decompose in a fire, giving off toxic and irritant vapours.

Carbon monoxide, carbon dioxide, acetaldehyde.

5.3. ADVICE FOR FIREFIGHTERS

Provide/wear protective breathing apparatus.

Powdered material may form an explosive dust-air mixture, high voltage static electricity build-up and discharge must be avoided when significant quantities of powdered material are present.

The degree of risk depends on the burning substance and fire conditions.

In case of combustion, formation of toxic gases/vapours 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

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.

Storage: 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

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Reference
Carbon Black	1333-86-4	NDS (inhalable dust)	4 mg/m^3	PL OEL
Further information	Inhalable fraction - the fraction of aerosol penetrating through the nose and mouth, which after deposit in the respiratory tract poses a threat to health., Related to technical soot which contains in 1 kg soot no more than 35 mg benzo[a]piren			

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

Physical state	Solid
Color	By assortment
Odor	None or slight
Melting point/freezing point	Does not exhibit a sharp melting point but softens gradually over a wide range of temperatures
Boiling point	Not determined
Flammability	No data
Lower and upper explosion limit	No data
Flash point	Not applicable
Auto-ignition temperature	No determined
Decomposition temperature	No determined
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Insoluble in water
Vapor pressure	Negligible
Density and/or relative density	1,34 g/cm^3
Relative vapour density	No determined
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.

Fire may produce irritating and/or toxic gases

May cause toxic effects if inhaled

Some may burn but none ignite readily

Stable under normal temperatures and pressure

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. Protect from temperatures above the decomposition temperature.

10.5. INCOMPATIBLE MATERIALS

No special restrictions.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Hydrocarbons, phenols, alkylphenols, and diarylcarbonates.

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity:

Oral:	>5000 mg/kg (estimated)
Skin:	Remarks: >2000 mg/kg (estimated)

Skin Corrosion / irritation:

The molten substance may cause thermal burns

Serious eye damage / irritation:

The molten substance may cause thermal burns

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:

Not classified

Reproductive toxicity:

No data / not classified

STOT – single exposure:

No data / not classified

STOT – repeated exposure:

Carbon Black (1333-86-4) – targets lungs

Aspiration hazard:

Carbon Black (1333-86-4) – targets lungs

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 diarrhoea.

May cause irritation and/or dermatitis. Ingestion may be irritating to the digestive system, cause nausea, vomiting and diarrhea. Inhalation of dust may cause shortness of breath, tightness in the chest, scratchy throat and coughing Paralysis from irritating fumes.

11.2.1. Endocrine disrupting properties:

No data.

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.

No other data is available

12.2. PERSISTENCE AND DEGRADABILITY

No data.

12.3. BIOACCUMULATIVE POTENTIAL

No data.

12.4. MOBILITY IN SOIL

No data.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

The product does not contain ingredients, which meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation..

12.6. ENDOCRINE DISRUPTING PROPERTIES

No data.

12.7. OTHER ADVERSE EFFECTS

Not known.

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 is 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.