SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Filament Spectrum LW-ASA UltraFoam

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: filament used in 3D printers.
Uses advises against: not determined.

1.3 Details of the supplier of the safety data sheet

Entity responsible: **Spectrum Group Sp. z o.o.**
Address: Parkowa 85, 05-806 Pęcice, Poland
Telephone: +48 608 109 008

E-mail address for a competent person responsible for sds: office@spectrumfilaments.com

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Aquatic Chronic 3 H412

Harmful to aquatic life with long lasting effects.

2.2 Label elements

Hazard pictograms and signal words

None.

Names of substances mentioned on label

None.

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container to properly labeled waste containers in accordance with national legislation.

Additional information

None.

2.3 Other hazards

The substances contained in the product do not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. 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 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS number: 540-84-1 EC number: 208-759-1 Index number: 601-009-00-8 REACH number: -	2,2,4-trimethylpentane Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	< 1 %

Full text of each relevant H phrase is given in section 16 of SDS.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact:

Filament: in case of exposure rinse contaminated skin using water with soap.

During printing process: possible thermal burns. Rinse damaged skin with water. Put on sterile dressing. Contact doctor.

Eye contact:

Filament: protect non-irritated eye, remove contact lenses. Rinse contaminated eyes with water for 10-15 minutes. Avoid strong stream of water – risk of damage of the cornea. Contact an ophthalmologist.

During printing process: splashes of liquid filament may cause burns. Put on sterile dressing. Contact an ophthalmologist immediately.

Ingestion: exposure by this route does not typically occur. If swallowed, rinse mouth with water. Do not induce vomiting. Contact a doctor, show container or label.

Inhalation:

Filament: exposure by this route does not occur.

During printing process: remove the victim to fresh air. Keep warm and calm. Consult a doctor, if disturbing symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

There are no significant effects or critical hazards reported under normal conditions of use. Prolonged inhalation of fumes evolved during the printing process may cause headaches, poor concentration, exhaustion.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: extinguishing powder, extinguishing foam, water spray, carbon dioxide.

Unsuitable extinguishing media: water jet – risk of fire propagation.

5.2 Special hazards arising from the substance or mixture

During combustion harmful fumes consisting of carbon oxides and other harmful products of thermal decomposition may be produced. Do not inhale combustion products, it may cause health risk.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Do not let extinguishing water to reach drainage system, surface water and groundwater. Collect used extinguishing media.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Handle in accordance with good occupational hygiene and safety practices. Ensure that effects of the breakdown are removed only by qualified personnel. Ensure adequate ventilation. Avoid inhalation of fumes evolved during the printing process.

6.2 Environmental precautions

In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment.

6.3 Methods and material for containment and cleaning up

Collect mechanically. Collected material should be reused or treated as a waste.

6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protective equipment – see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Use only as intended. In case of rubbing or friction, accumulation of electrostatic charges on the filament surface may occur. Accumulated electric charge can be transferred to the user and may be a source of ignition - use extreme caution when working with flammable materials.

7.2 Conditions for safe storage, including any incompatibilities

Store filament only in a cool, dry place protecting against weather (direct sunlight, frost, precipitation etc.). Protect from sources of fire and naked flames. Do not store with incompatible materials (see subsection 10.5).

7.3 Specific end use(s)

No information about uses other than mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Product does not contain components with occupational exposure limit values established on the European Union level.

Legal Basis: 91/322/EEC as amended, 98/24/EC as amended, 2000/39/EC as amended, 2004/37/EC as amended.

Please check also any national occupational exposure limit values in your country.

8.2 Exposure controls

Appropriate engineering controls

Observe good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Wash hands thoroughly before breaks and after work.

Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk created by the product, conditions at the workplace and the manner of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards.

Hand and body protection

Use protective gloves and protective clothing (EN 374). Recommended gloves material should be selected individually at the workplace.

Eye protection:

Use tightly fitting protective glasses (EN ISO 16321-1:2022-10).

Respiratory protection:

Under normal conditions of use is not required. In emergency situation, when exposed to high concentrations of fumes evolved in printing process appropriate respiratory protective equipment should be worn.

Thermal hazards

If contact with the hot product is expected, use heat-resistant gloves in accordance with EN 407 standard.

Environmental exposure controls

Avoid release of large amounts of the product to groundwater, drainage system or soil.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	solid/filament
Colour:	acc. assortment
Odour:	characteristic
Melting point/freezing point:	ca 302 °C (CAS 540-84-1)
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	product is not classified in terms of flammability
Lower and upper explosion limit:	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 applicable
Density and/or relative density:	not applicable
Relative vapour density:	not applicable
Particle characteristics:	not determined

9.2 Other information

No additional test results.

Section 10: Stability and reactivity

10.1 Reactivity

Product is resistant to chemicals. See also subsections 10.3-10.5.

10.2 Chemical stability

The product is stable under normal conditions of handling and storage.

10.3 Possibility of hazardous reactions

Not known.

10.4 Conditions to avoid

Protect from direct sunlight, moisture, sources of fire and heat, except from processes connected directly with using of the product.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Not 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, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

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.

Information on likely routes of exposure

Routes of exposure: skin contact, eye contact, inhalation. See subsection 4.2 for more information on the effects from each possible route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Hot product vapours may cause eye irritation. Contact with the hot product may cause skin burns.

Delayed and immediate effects as well as 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 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 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Other information

Not known.

Section 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data.

12.3 Bioaccumulative potential

No data.

12.4 Mobility in soil

Product is not mobile in soil.

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.

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 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

12.7 Other adverse effects

Product has no influence on global warming and destruction of the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg., global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Waste material should be stored in designated place for recycling or utilization. Waste product should be recovered or disposed of in authorized incineration plants or waste facility in accordance with local regulations.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN number or ID number

Not applicable. Product is not classified as dangerous during transportation.

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** Of The European Parliament and Of The Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC) as amended.

2000/39/EC Commission Directive of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work as amended.

Council Directive **98/24/EC** of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) as amended.

91/322/ECC Commission Directive of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work as amended.
ADR Agreement concerning the International Carriage of Dangerous Goods by Road.
IMDG Code International Maritime Dangerous Goods Code
IATA Dangerous Goods Regulations
1907/2006/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (as amended).
1272/2008/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (as amended).
2020/878/EU COMMISSION REGULATION of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
2008/98/EC DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives (as amended).
European Parliament and Council Directive **94/62/EC** of 20 December 1994 on packaging and packaging waste as amended
2016/425/EU REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

15.2 Chemical safety assessment

It is not necessary to carry out a chemical safety assessment for mixture.

Section 16: Other information

Full text of indicated H phrases mentioned in section

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
Aquatic Acute 1	Toxicity for aquatic organisms – acute toxicity category 1
Aquatic Chronic 1	Toxicity for aquatic organisms – chronic toxicity category 1
Asp. Tox. 1	Aspiration hazard cat. 1
Flam. Liq. 2	Flammable liquid cat. 2
Skin Irrit. 2	Skin irritation cat. 2
STOT SE 3	Specific target organ toxicity — single exposure cat. 3

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Procedures used to classify the mixture

Classification was based on data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.

Key literature references and data sources

This sheet was prepared on the basis of on manufacturer's data, literature data, online databases, our knowledge and experience, taking into account the current legislation.

Spectrum FILAMENTS

SAFETY DATA SHEET

Other informations

Date of issue:	23.06.2025
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The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.