

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

1. Product identifier

Product name: rPETG EN13501-1 FR (B-s1, d0)

2. Relevant identified uses of the substance or mixture and uses advised against

Identifies uses: Filament for FDM 3D printing.

3. Details of the supplier of the safety data sheet:

Supplier: Laboratorio Geométrico S.L.
Calle Segunda (Polígono Industrial El Montalvo III), 4,
37188, Carbajosa de la Sagrada
info@winkle.shop
+34 627 924 972

4. Emergency telephone number

Emergency telephone numbers : 112

2. HAZARDS IDENTIFICATION

1. Classification of the substance or mixture

Product is not classified as hazardous for human life and health and for the environment.

2. Label elements

Markings according to EC guidelines: According to the method of calculating the " General Classification Guideline for the Production of the EC " in the latest valid version, the product does not require labeling. The normal safety measures for handling chemicals should be observed.

- **Hazard pictograms and signal words:** None
- **Names of substances mentioned on label:** None
- **Hazard statements:** None
- **Precautionary statements:** None

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

1. Substances

Not applicable.

2. Mixtures

PETG based mixture.

No dangerous ingredients according to REACH-Regulation (EC) No. 1907/2006.

Candidate List of Substances of Very High Concern for Authorization

This product contains no substances of very high concern in concentrations where an information obligation applies (REACH Regulation (EC) No. 1907/2006, Article 59).

4. FIRST AID MEASURES

1. Description of first aid measures

Eye contact:

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

Skin contact:

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

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:

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

2. Most important symptoms and effects, both acute and delayed

- Skin contact: contact with the product at high temperature may cause severe burns.
- Eye contact: there are no significant effects or critical hazards reported under normal conditions of use
- Inhalation: prolonged inhalation of fumes evolved during the printing process may cause headaches, poor concentration, exhaustion..

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.

5. FIREFIGHTING MEASURES

1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam, water spray.

Unsuitable extinguishing media Water jet – risk of fire propagation

2. Specific hazards associated with a substance or mixture

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen. In the event of fire and/or explosion do not breathe fumes.

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.

6. ACCIDENTAL RELEASE MEASURES**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.

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.

3. Methods and material for containment and cleaning up

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

4. Reference to other sections

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

7. HANDLING AND STORAGE**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.

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).

3. Specific end use(s) recommendations

No information about uses other than mentioned in subsection 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

1. Control parameters

No information on Exposure Limit Values necessary according to EC directive 2006/121/EG.

2. Exposure controls

Engineering measures:

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.

Where possible, local exhaust ventilation and good general room ventilation should be used.

Provide adequate exhaust ventilation in places of dust formation.

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.

General safety and hygiene:

Keep away from foodstuffs, beverages, and food.

Do not eat, drink, smoke.

Do not breathe dust / smoke.

Avoid contact with eyes and skin.

Wash hands before breaks and after work.

Breathing equipment:

Under normal conditions of use is not required.

In case of dust formation use respiratory equipment with filter type particle filter P1 according to EN 143.

In emergency situation, when exposed to high concentrations of fumes evolved in printing process appropriate respiratory protective equipment should be worn.

Hand and body protection:

Use protective gloves and protective clothing if a risk assessment indicates this is necessary (EN 374).

Eye protection:

Use tightly fitting protective glasses if risk assessment indicates that it is necessary (EN ISO 16321-1:2022-10).

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Appearance:	Wire, filament, or pellets
Color:	According to assortment
Odour:	Odourless
Vapor pressure:	No information available
Vapor density:	Not determined
Evaporation rate:	Not determined
pH:	
Partition Coefficient (n-octanol/water):	Not determined
Density:	1,27 g/cm ³ at 20 °C
Decomposition temperature:	Not determined
Boiling point / boiling range:	Not determined
Melting point / melting range:	Not determined
Autoignition temperature:	Not determined
Freezing point:	80-130 °C
Flash point:	Not determined
Flammability:	Product is not classified in terms of flammability
Flammability Limits in Air:	No information available
Water solubility:	Not determined
Solubility in other solvents:	None known
Solubility:	No information available
Other Standards:	None

Other information:

No additional information available

10. STABILITY AND REACTIVITY

1. Reactivity

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

2. Chemical stability

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

3. Possibility of hazardous reactions

Not known.

4. Conditions to avoid

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

5. Incompatible materials

Not known.

6. Hazardous decomposition products

Not known.

11. TOXICOLOGICAL INFORMATION

1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Principle routes of exposure:	Skin contact, Eye contact, Inhalation, Ingestion.
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 vapors 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

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:

No data

12. ECOLOGICAL INFORMATION

1. Ecotoxicity effects

Product is not classified as hazardous for the environment.

2. Persistence and degradability

No data available.

3. Bioaccumulative potential

No data available.

4. Mobility in soil

Product is not mobile in soil.

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.

6. Endocrine disrupting properties

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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).

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

1. UN number

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

2. UN Proper shipping name

Not applicable.

3. Transport hazards classes

Not applicable.

4. Packaging group

Not applicable.

5. Environmental hazards

Not applicable.

6. Special precautions for user

Not applicable.

7. Maritime transport in bulk according to IMO instruments

Not applicable

15. REGULATORY INFORMATION

1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 1907/2006 Of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization 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.

Commission Regulation (EU) No 2020/878 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 (REACH).

Regulation (EC) No 1272/2008 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.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

Regulation (EU) No 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

Commission Directive 2000/39/EC 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.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

2. Chemical Safety Assessment

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

16. OTHER INFORMATION

1. Explanations of abbreviations:

- CLP: Regulation No. 1272/2008
- IATA: International Air Transport Association
- IMDG: International Maritime Dangerous Goods
- IMO: International Maritime Organisation
- PBT: Persistent, Bioaccumulative, Toxic
- REACH: Registration, Evaluation and Authorisation of Chemicals
- vPvB: very Persistent, very Bioaccumulative
- STEL: Short-Term Exposure Limit
- LD50: Lethal Dose

- LC50: Lethal Concentration
- EC50: Effective Concentration 50%
- DNEL: Derived No-Effect Level
- PNEC: Predicted No-Effect Concentration
- OEL: Occupational Exposure Limit
- ADR: Agreement concerning the International Carriage of Dangerous Goods by Road
- AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- RID: regulations for international transport of dangerous goods by rail
- MARPOL: International Convention for the Prevention of Pollution from Ships

Disclaimer:

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