

PRODUCT NAME: 3D FILAMENT ABS V0 FR

PRODUCT DESCRIPTION: ABS V0 FR filament - poli(akrylonitryl-co-butadien-co-styren) in the form of a thread, designed for 3D printing using the FFF/FDM method. Filament coiled on spools, vacuum-packed with desiccant in a PA/PE bag, and then in a box.

SECTION 1: Product and company identification

1.1 Product identification

Product name: 3D FILAMENT ABS V0 FR
Trade name: 3D FILAMENT ABS V0 FR 1,75mm
Chemical name: poli(akrylonitryl-co-butadien-co-styren)

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

Identified uses: Extrusion in FDM 3D printing.

1.3 Data on the supplier of the safety data sheet

Supplier: ROSA PLAST Sp. z o.o.
05-074 Hipolitów, Poland
ul. Hipolitowska 102B
tel: +48 783 62 62

E-mail address of the person responsible for this safety datasheet: 3d@rosaplast.pl

SECTION 2: Hazard identification

2.1. Classification of a substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Carc. 2: Carcinogenicity, Category 2, H351

2.2 Label elements

CLP Regulation (EC) No 1272/2008

Warning

Free of labeling in accordance with Regulation (EC) 1272/2008 - Annex I - 1.3.4

The compounds containing polymers do not require labeling, if no risk to human health by inhalation, ingestion or contact with the skin or the aquatic environment in the form in which they are placed on the market, although classified as hazardous.

Hazard statements

Carc. 2: H351 - Suspected of causing cancer

Precautionary statements

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P308+P313: If exposed or concerned: Get medical advice/attention.

P405: Store locked up.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

Antimony trioxide.

2.3 Other hazards

Product fails to meet PBT/vPvB criteria.

SECTION 3: Composition/information about ingredients

3.1. Substance

Non-applicable.

3.2 Mixture

Chemical description: Polymer/s

Components: In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Chemical name: antimony trioxide⁽¹⁾

CAS: 1309-64-4

EC: 215-175-0

Index: 051-005-00-X

REACH: 01-2119475613-35-XXXX

Carc. 2: H351 – Warning

Percentage: 2,5 - <10 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: First aid measures

General information: If you feel unwell, seek medical advice (show the label where possible).

4.1. Description of first aid measures

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

Inhalation: This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

Skin contact: In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet.

Eye contact: This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

Ingestion: In case of consumption, seek immediate medical assistance showing the Safety Data Sheet for the product.

4.2. Main acute and delayed symptoms and effects of exposure

Acute and delayed effects are indicated in sections 2 and 11.

4.3. Indications regarding all immediate medical attention and special treatment of the victim

Non-applicable

SECTION 5: Firefighting measures

5.1. Extinguishing agents

Suitable extinguishing media: Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media: Non-applicable.

5.2. Specific hazards associated with a substance or mixture

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3. Information for the firefighters

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit, etc.) in accordance with Directive 89/654/EC.

Additional provisions

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage

containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: Unintended release into the environment

6.1. Individual precautions, protective equipment and emergency procedures

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal.

6.2. Environmental precautions

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3. Methods and materials to prevent the spread of contamination and to remove contamination

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.4. References to other sections

See sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

Technical recommendations for the prevention of fires and explosions: Due to its inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

Technical recommendations to prevent ergonomic and toxicological risks: Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

Technical recommendations to prevent environmental risks: It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2. Safe storage conditions, including incompatibilities.

Technical measures for storage: Store in a cool, dry, well-ventilated location

General conditions for storage: Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3. Specific end use(s)

Extrusion in FDM 3D printing.

SECTION 8: Exposure control/personal protective equipment

8.1. Control parameters

Occupational exposure limits

Ingredient: antimony trioxide

CAS: 1309-64-4

EC: 215-175-0

DNEL (workers)

Long exposure, dermal, systemic: 67 mg/kg

Long exposure, inhalation, local: 0,315 mg/m³

DNEL (general population)

Short exposure, oral, systemic: 33,5 mg/kg

Short exposure, dermal, systemic: 33,5 mg/kg

Long exposure, inhalation, local: 0,095 mg/m³

PNEC

STP: 3,05 mg/l

Soil: 44,3 mg/kg

Fresh water: 0,135 mg/l

Marine water: 0,013 mg/l

Sediment (fresh water): 13,4 mg/kg

Sediment (marine water): 2,68 mg/kg

8.2. Exposure control

General security and hygiene measures in the workplace: As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal. Individual protection measures, such as personal protective equipment.

General information: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Hand protection:

Mandatory hand protection - NON-disposable chemical protective gloves. The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. As the product is a mixture of several substances, the resistance of the glove material cannot be calculated in advance with total reliability and has therefore to be checked prior to the application.

Skin protection:

Mandatory complete body protection - disposable clothing for protection against chemical risks. For professional use only. Clean periodically according to the manufacturer's instructions.

Foot protection:

Mandatory foot protection - safety footwear for protection against chemical risk. Replace boots at any sign of deterioration.

Eye/face protection:

Mandatory face protection - face shield. Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

Respiratory protection:

Mandatory respiratory tract protection - filter mask for gases, vapours and particles. Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

Emergency measure:

Emergency shower.

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 0% weight

V.O.C. density at 20°C: 0 kg/m³ (0 g/L)

Average carbon number: Non-applicable.

Average molecular weight: Non-applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

For complete information see the product datasheet.

Physical state at 20°C: Solid.

Colour: Depends on used masterbatch.

Odour: Characteristic.

pH: Not applicable.

Melting point/freezing point: Not applicable.

Initial boiling point and boiling range: Not applicable.

Flash point: Not applicable.

Evaporation rate: Not applicable.

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits: Not applicable.

Vapor pressure: Not applicable.
Vapor density: Not applicable.
Solubility: Not applicable.
Partition coefficient (n-octanol/water): Not applicable.
Auto-ignition temperature: Not applicable.
Decomposition temperature: Not applicable.
Viscosity: Not applicable.
Explosive properties: Not applicable.
Oxidizing properties: Not applicable.

9.2. Other information

Surface tension at 20°C: not applicable
Refraction index: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2. Chemical stability

Chemically stable under the conditions of storage, handling and use.

10.3. Possibility of dangerous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Applicable for handling and storage at room temperature:
Shock and friction: not applicable.
Contact with air: not applicable.
Increase in temperature: not applicable.
Sunlight: not applicable.
Humidity: not applicable.

10.5. Non-compliant material

Acids: avoid strong acids.
Water: not applicable.
Oxidizing materials: not applicable.
Combustible materials: not applicable.
Others: avoid alkalis or strong bases.

10.6. Hazardous decomposition products

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information: The experimental information related to the toxicological properties of the product itself is not available.

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

Inhalation (acute effect)

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Contact with the skin and the eyes (acute effect)

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
IARC: Poly(acrylonitrile-co-butadiene-co-styrene) (3); antimony trioxide (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Sensitizing effects

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitizing effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Specific target organ toxicity (STOT)-repeated exposure

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Aspiration hazard

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information

Non-applicable.

Specific toxicology information on the substances

Not available.

SECTION 12: Ecological information

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

Product fails to meet PBT/vPvB criteria.

12.6 Other adverse effects

Not described.

SECTION 13. Waste management

13.1. Methods of waste disposal

Code: 16 03 05*

Description: organic wastes containing hazardous substances

Waste class (Regulation (EU) No 1357/2014): dangerous

Type of waste (Regulation (EU) No 1357/2014): HP7 Carcinogenic

Waste management (disposal and evaluation)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the

code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: Transport information

This product is not regulated for transport (ADR/RID,IMDG,IATA)

14.1. UN number

Not applicable.

14.2. Valid UN shipping name

Not applicable.

14.3. Hazard class(es) in transport

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental risks

Not applicable.

14.6. Special precautions for users

Not applicable.

14.7. Bulk transport in accordance with Annex II to MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental legislation specific for the substance or mixture

Candidate substances for 10 authorization under the Regulation (EC) No 1907/2006 (REACH)

Non-applicable.

Substances included in Annex XIV of REACH ("Authorization List") and sunset date

Non-applicable.

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer

Non-applicable.

Article 95, REGULATION (EU) No 528/2012

Non-applicable.

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products

Non-applicable.

Seveso III

Non-applicable.

Limitations to commercialization and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable.

Specific provisions in terms of protecting people or the environment

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation

The product could be affected by sectorial legislation.

15.2 Chemical safety assessment

The supplier has not carried out evaluation of chemical safety.

SECTION 16: Other information

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks

Non-applicable

Texts of the legislative phrases mentioned in section 2

H351: Suspected of causing cancer.

Texts of the legislative phrases mentioned in section 3

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008

Carc. 2: H351 - Suspected of causing cancer.

Classification procedure

Carc. 2: Calculation method

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

EXPLANATIONS OF ABBREVIATIONS:

- CLP: Regulation No. 1272/2008
- DNEL: Derived No-Effect Level
- PNEC: Predicted No-Effect Concentration
- IATA: International Air Transport Association
- IMDG: International Maritime Dangerous Goods
- ICAO: International Civil Aviation Organization
- COD: Chemical Oxygen Demand
- PBT: Persistent, Bioaccumulative, Toxic
- REACH: Registration, Evaluation and Authorization of Chemicals
- vPvB: very Persistent, very Bioaccumulative
- OEL: Occupational Exposure Limit
- ADR: Agreement concerning the International Carriage of Dangerous Goods by Road
- MARPOL: International Convention for the Prevention of Pollution from Ships
- BOD5: 5-day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- LC50: Lethal Concentration 50
- EC50: Effective concentration 50
- LogPOW: Octanol water partition coefficient
- Koc: Partition coefficient of organic carbon
- UFI: Unique Formula Identifier

Note for users:

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. ROSA PLAST Sp. z o.o. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.



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