

ABS-X

SAFETY DATA SHEET



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

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|--|---------------------------------------|
| Product identifier | |
| Trade name | Filament ABS-X 1,75mm; ABS-X 2,85mm |
| Relevant identified uses of the substance or mixture and uses advised against | |
| Relevant identified uses | Thermal processing: FDM/FFF |
| Uses advised against | No data. |
| Details of the supplier of the safety data sheet | |
| Manufacturer/Supplier | VSHAPER Sp. z o.o. |
| Address | Tajęcina 105, 36-002 Jasionka-Rzeszów |
| Telephone | +48 801 011 637 |
| Email | contact@vshaper.com |
| Emergency telephone number | EU-wide emergency number: 112 |

2. IDENTYFIKACJA ZAGROŻENIA

| | |
|--|----------------|
| Labeling according to Regulation (EC)No 1272/2008 [CLP] | |
| Hazard pictogram(s) | Not applicable |
| Signal word | Not applicable |
| Hazard statement(s) | Not applicable |
| Precautionary statement(s) | |
| Prevention | Not applicable |
| Response | Not applicable |
| Storage | Not applicable |
| Disposal | Not applicable |
| Labelling according to Directive 1999/45/EC | |
| Symbol(s) | Not applicable |
| Risk phrases | Not applicable |
| Safety phrases | Not applicable |
| Other hazards | Not available |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substances | | | | Not applicable |
|--|-----------|------------|-----------------------------|-------------------------------|
| Mixtures | | | | |
| Name | CAS No. | % [weight] | Classification [67/548/EEC] | Classification [1272/2008/EC] |
| 2-Propenenitrile polymer wit 1,3- butadiene and ethenylbenzene | 9003-56-9 | > 95 | Not classified | Not classified |
| Additives | - | 1 – 10 | Not classified | Not classified |

4. FIRST AID MEASURES

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| General | No general information |
| Inhalation | When exposed to large amounts of steam and mist, move to fresh air. Take specific treatment if needed |
| Skin | Flush skin with plenty of water at least 15 minutes while removing contaminated clothing and shoes. Laundering enough contaminated clothing before reuse. |
| Eye | Do not rub your eyes. Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician. |
| Ingestion | About whether you should induce vomiting take the advice of a doctor. Rinse your mouth with water immediately. |
| Most important symptoms and effects, both acute and delayed | Not available |
| Indication of any immediate medical attention and special treatment needed | Notify medical personnel of contaminated situations and have them take appropriate protective measures. |

5. FIREFIGHTING MEASURES

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| Extinguishing media | Suitable extinguishing media Dry chemical, carbon dioxide, regular foam extinguishing agent, spray. Unsuitable extinguishing media Avoid use of water jet for extinguishing. |
| Special hazards arising from the substance or mixture | Hazardous combustion products: not available |
| Advice for firefighters | Keep unauthorized personnel out. Avoid inhalation of materials or combustion by-products. Keep away if the tank is on fire. Use fire fighting procedures suitable for surrounding area. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | <p>For non-emergency personnel Protective equipment: wear proper protective equipment. Emergency procedures: not applicable. If required, notify relevant authorities according to all applicable regulations.</p> <p>For emergency responders Wear appropriate personal protective equipment as indicated in Section 8, and avoid contact with skin and inhalation. Before entering a closed room, it should be aired. Do not touch the spilled product. Stop leak if you can do it without risk. Handle damaged containers or spilled material wearing personal protective equipment.</p> |
| Environmental precautions | <p>Prevent runoff and contact with waterways, drains or sewers. If large amount have been spilled, inform the relevant authorities. Avoid dispersal of split material and runoff and contact with waterways, drains and sewers. If large spills, advise emergency services.</p> |
| Methods and material for containment and cleaning up | <p>For containment Clear area of personnel and move up wind. Prevent, by any means available, spillage from drains or water course. No smoking, naked lights or ignition sources.</p> <p>For cleaning up Large spill: stay upwind and keep out of low areas. Dike for later disposal. Notification to central government, local government. When emissions at least of the standard amount. Dispose of waste in accordance with local regulation. Appropriate container for disposal of spilled material collected. Small liquid state spills: appropriate container for disposal of spilled material collected. For disposal of spilled material in appropriate containers collected and clear surface.</p> <p>Other information Slippery when spilt</p> |
| Reference to other sections | <p>See section 7 for information on safe handling See section 8 for information on personal protection equipment. See section 13 for information on disposal</p> |

7. HANDLING AND STORAGE

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| Precautions for safe handling | <p>Refer to Engineering controls and personal protective equipment. Dealing only with a well-ventilated place. Operators should wear antistatic footwear and clothing.</p> |
| Conditions for safe storage, including any incompatibilities | <p>Do not expose to direct heat. Comply with applicable laws and regulations. Do not shake the container. Store in original container.</p> |
| Specific end use(s) | <p>See section 1 for information on 1.2. Relevant identified uses</p> |

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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|--|--|
| Control parameters | |
| Occupational exposure limits | |
| European Union (EU) Commission Directive 2006/15/EC (IOELVs) | not available |
| European Union (EU) Commission Directive 2006/15/EC (IOELVs) – skin | not available |
| Recommended Monitoring Procedures | Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. |
| DNEL/PNEC – values | not available |
| Individual protection measures, such as personal protective equipment | <p>Hand protection Wear appropriate glove</p> <p>Eye protection Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield. Provide an emergency eye wash station and quick drench shower in the immediate work area.</p> <p>Respiratory protection Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use. Dust, mist, fume-purifying respiratory protection. Any air-purifying respiratory with a corpuscle filter of high efficiency. Any respiratory protection with a electromotion fan (for dust, mist, fume-purifying). Self-contained breathing apparatus with a corpuscle filter of high efficiency. For unknown concentration or immediately dangerous to life or health: any supplied-air respirator with full facepiece and operated in a pressure- demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus a full facepiece.</p> <p>Skin protection Wear appropriate clothing</p> <p>Others It is necessary to wear protective clothes and other protection equipment. Cover your face, head and neck. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon of the garments and hood. Emergency deluge shower and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure likely</p> |

Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures above the Exposures Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

Thermal hazards

Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|--|-------------------------|
| Appearance (state) | Solid (fiber, filament) |
| Appearance (color) | Not available |
| Odor | Not available |
| Odor threshold | Not available |
| pH | Not available |
| Melting point/Freezing point | Not available |
| Initial boiling point and boiling range | Not available |
| Flash point | Not available |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Not available |
| Upper/Lower Flammability or explosive limits | Not available |
| Vapour pressure | Not available |
| Vapour density | Not available |
| Relative density | 1,02 – 1,08 |
| Solubility | Not available |
| Partition coefficient of n-octanol/water | Not available |
| Autoignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | Not available |
| Explosive properties | Not available |

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|----------------------|---------------|
| Oxidizing properties | Not available |
| Other information | Not available |

10. STABILITY AND REACTIVITY

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|------------------------------------|--|
| Reactivity | Not available |
| Chemical stability | This material is stable under recommended storage and handling conditions |
| Possibility of hazardous reactions | Hazardous polymerization will not occur under normal conditions |
| Conditions to avoid | Avoid contact with incompatible materials and conditions. Avoid: accumulation of electrostatic charges, heating, flames and hot surfaces |
| Incompatible materials | Not available |
| Hazardous decomposition products | May emit flammable vapour if involved in fire. |

11. TOXICOLOGICAL INFORMATION

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|--|---|
| Acute toxicity | Oral Not available Dermal Not available Inhalation Not available |
| Skin corrosion/irritation | Not available |
| Eye corrosion/irritation | Not available |
| Respiratory sensitization | Not available |
| Skin sensitization | Not available |
| Mutagenicity | Not available |
| Carcinogenicity | IARC Not available OSHA Not available ACGIH Not available NTP Not available UE CLP Not available |
| Reproductive toxicity | Not available |
| Specific target organ toxicity (single exposure) | Not available |
| Specific target organ toxicity (repeated exposure) | Not available |
| Aspiration hazard | Not available |

12. ECOLOGICAL INFORMATION

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|---|---|
| Toxicity | Fish [2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene]: LC50 11,5 mg/ℓ 96 hr Pimephales promelas, Not available Invertebrate Not available Algae Not available |
| Persistence and degradability | Persistence Not available Degradability Not available |
| Mobility in soil | Not available |
| Results of PBT and vPvB assessment | Not available |
| Other adverse effects | Not available |

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Since more than two kinds of designated waste is mixed, it is difficult to treat separately, then can be reduction or stabilization by incineration or similar process. If water separation is possible, pre- process with Water separation process. Dispose by incineration. The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities. Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

| | |
|-------------------------------------|---|
| Un number | ADR/RID/ADN Not available IMDG Not available ICAO Not available |
| Transport hazard class(es) | ADR/RID/ADN Class Not available ADR Label No. Not available Klasa(y) zagrożenia w transporcie Not available ICAO Class/Division Not available |
| Packing group | ADR/RID/ADN Not available IMDG Not available ICAO Not available |
| Environmental hazard | Not applicable |
| Special precautions for user | Local transport follows in accordance with dangerous good safety management law. Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements. EmS FIRE SCHEDULE: Not available EMS SPILLAGE SCHEDULE: Not available |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulation/legislation specific for the substance or mixture (Europe regulatory)

REACH Restricted substance under REACH Not applicable

REACH Substance subject to authorization under REACH Not applicable

REACH SVHC Not applicable

European Union (EU) Transport of Dangerous by Road – Dangerous Good List Not applicable

Chemical safety assessment Not conducted

16. OTHER INFORMATION

Indication of changes

The Safety Data Sheet has been reviewed and the data therein were revised and laid out according the requirements of the Commission Regulation (EU) No. 453/2010.

Abbreviations and acronyms

1272/2008 CLP : Classification, Labelling and Packaging regulation.
 REACH : Registration, Evaluation and authorization of chemical substances.
 DNEL : Derive no effects level
 PNEC : Predicted no effect concentration

Key literature references and sources for data

The product safety data sheet has been prepared based on the documentation provided by the manufacturer of the granulate from which the filament product was made.

Relevant R phrases and H statements

The classification of the mixture was obtained on the basis of the classification of individual components, in accordance with the principles set out in Regulation (EC) No 1272/2008 (CLP) and the translation tables in Annex VII to this Regulation.

Training advice

Not applicable

Further information

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