

PET-G

SAFETY DATA SHEET



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

Product identifier	
Trade name	Filament PET-G 1,75mm; Filament PET-G 2,85mm
Relevant identified uses of the substance or mixture and uses advised against	
Relevant identified uses	Thermal processing: FDM/FFF
Uses advised against	Not available
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	kontakt@vshaper.com
Emergency telephone number	EU-wide emergency number: 112

2. HAZARD IDENTIFICATION

Classification of the substance/mixture	The substance is not classified as dangerous according to Regulation (EC) No 1272/2008 (CLP/GHS)
Label elements	
Hazard Pictogram	not applicable
Signal Word	not applicable
Hazard Statements	not applicable
Precautionary Statements	not applicable
Other hazards	

The hazards of this product are associated mainly with its processing. Molten polymer will produce thermal burns. Polymer dust may represent a fire hazard at sufficient concentrations in presence of ignition sources. This substance contains no components considered to be either persistent, Bioaccumulative and toxic (PBT), or very persistent and very Bioaccumulative (vPvB) at levels of 0,1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures		Not applicable
Substances		
Substance Name	Concentration (%)	Classification Regulation EC No 1272/2008
Co-polyester	> 99,9	Not Classified

The polymer contains minor additives such as stabilizers and catalysts. These additives are immobilized by the polymer and are not released with normal use.

4. FIRST AID MEASURES

Inhalation	Move exposed person to fresh air in case of accidental inhalation of dust or fumes from overheating or combustions. 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 and show the TDS.
Most important symptoms and effects, both acute and delayed	No data available
Indication of any immediate medical attention and special treatment needed	Notes to physician: treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments: no specific treatment.

5. FIREFIGHTING MEASURES

Extinguishing media Suitable extinguishing media	Unusual fire and explosion hazards Powder material may form explosive dust-air mixtures. High voltage static electricity build-up and discharge must be avoided when significant quantities of powdered material are present.
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus, protective clothing and headgear to prevent contact with skin and eyes.

6. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal precautions, protective equipment and emergency procedures	<p>For non-emergency personnel Put on appropriate personal protective equipment. Spillages may be slippery. Clear up spillages. The molten polymer may remain hot for some time due to low thermal conductivity. User care when disposing of molten mass. Do not breath vapours or fumes that may be evolved during processing.</p> <p>For emergency responders If specialized lothingis required to deal with the spillage, note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p>
Environmental precautions	<p>Avoid dispersal of spilt material an runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Methods and material for containment and cleaning up	<p>Vacuum or sweep up material and place in a container for re-occuperate or disposal. Avoid dust generation</p>
Reference to other sections	<p>See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.</p>

7. HANDLING AND STORAGE

<p>The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).</p>	
Precautions for safe handling	<p>Protective measures Put on appropriate personal protective equipment (see Section 8).</p> <p>Advice on general occupational hygiene Adequate ventilation and cleanliness must be employed in the processing area. Area should be controlled using good occupational hygiene practices. Accumulation of the dust mat represent a fire and explosion hazard at sufficient concentrations. Remove ignition sources. Beware of electrostatic charges.</p>
Conditions for safe storage, including any incompatibilities	<p>Keep containers closed when not in use. Store in original container in a dry, cool and well-ventilated area, away from flame, ignition sources, direct sunlight or incompatible materials (see Section 10). Maintain good housekeeping to control dust accumulations</p>
Specific end use(s)	<p>Recommendations: not available Industrial sector specific solutions: not available</p>

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters	
Occupational exposure limits	No exposure limit value known
Exposure controls	<p>Appropriate engineering controls</p> <p>Good general ventilation (typically 10 air changes per hour) should be used. Provide for appropriate exhaust ventilation and dust collection at machinery. Provide exhaust ventilation at places where dust formed.</p>
Individual protection measures	
Hygiene measures	Wash hands before eating and at the end of the working period
Eye/face protection	Not required under normal conditions of uses. Safety eyewear should be used when there is a likelihood of exposure. Recommended: safety glasses with side shields when working with molten material
Hand protection	Protective gloves are required when handling hot polymer
Other skin protection	Appropriate footwear and additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. A safety shower and washing facilities should be available.
Respiratory protection	Not required under normal conditions of uses. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. If respirator are used a program should be instituted to assure compliance with OSHA standard (OSHA Respiratory Protection Program Guidelines).

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties	
Appearance	solid (filament).
Odour	slight.
Odour threshold	not available.
pH	not applicable.
Initial boiling point and boiling range	not applicable.
Flash point	not applicable, combustible solid.
Evaporation rate	not applicable.

Flammability	non-flammable.
Vapour pressure	not applicable.
Vapour density	not applicable.
Relative density	> 1,27 g/cm ³
Solubility (ies)	insoluble in water.
Auto-ignition temperature	not applicable.
Decomposition temperature	not applicable.
Explosive properties	not applicable.
Oxidizing properties	not applicable.
Other information	No additional data

10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical stability	The product is stable
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur
Conditions to avoid	No specific data
Incompatible materials	Acetic anhydride, acetone, aniline, benzene, chloroform, chromic acid, cyclohexanone, dimethylformamide, dioxane, ethyl acetate, phenol, tetrahydrofuran. Reactive with strong oxidizing agents, as well as strong acids and caustic will decompose polyester
Hazardous decomposition products	Carbon monoxide, carbon dioxide, acetaldehyde

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure	<p>Inhalation: combustion products may be irritant. High concentration of dust may be irritant to the respiratory tract.</p> <p>Ingestion: expected to be a low ingestion hazard</p> <p>Skin contact: may cause physical abrasion in contact with skin. Molten polymer will adhere to the skin causing deep thermal burns</p> <p>Eye contact: may cause physical abrasion in contact with eyes</p>
Acute toxicity	No known significant effects or critical hazards

Skin corrosion/irritation	No known significant effects or critical hazards
Eye corrosion/irritation	No known significant effects or critical hazards
Respiratory sensitization	No known significant effects or critical hazards
Skin sensitization	No known significant effects or critical hazards
Mutagenicity	No known significant effects or critical hazards
Carcinogenicit	No known significant effects or critical hazards
Reproductive toxicity	No known significant effects or critical hazards
Specific target organ toxicity (single exposure)	Not available
Specific target organ toxicity (repeated exposure)	Not available
Aspiration hazard	No known significant effects or critical hazards

12. ECOLOGICAL INFORMATION

Toxicity	Not available
Persistence and degradability	Not available
Bioaccumulative potential	Not available
Mobility in soil	Soil/water partition coefficient (KOC): insoluble in water Mobility: not available
Results of PBT and vPvB assessment	Not available
Other adverse effects	No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product	<p>Methods of disposal: like most thermoplastics, the product can be recycled. Can be landfilled or incinerated, when in compliance with local regulations.</p> <p>Hazardous waste: within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.</p>

Packaging
Method of disposal:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

this material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of split material an runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

The substance is not subject to transport regulations on hazardous goods included in ADR (road transport), RID (rail transport), IMDG (marine transport) and ICAO/IATA (air transport).

Un number	Not applicable
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UN proper shipping name	Not applicable
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Transport hazard class(es)	None
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Packing group	Not applicable
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Environmental hazard	Not applicable
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Special precautions for user	None
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable
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15. REGULATORY INFORMATION

Safety, health and environmental regulation/legislation specific for the substance or mixture

Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer: None of the components are listed.

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: None of the components are listed.

Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals: None of the components are listed.

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances: None of the components are listed.

Chemical safety assessment	Not available
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16. OTHER INFORMATION

Indication of changes	Not applicable
Abbreviations and acronyms	No additional data
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	No additional data
Training advice	No additional data
Further information	

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