

PC/ABS I

SAFETY DATA SHEET



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

Product identifier	
Trade name	Filament PC/ABS I 1,75mm
Relevant identified uses of the substance or mixture and uses advised against	
Relevant identified uses	Thermal processing: FDM/FFF
Uses advised against	Do not use without advised use
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
Numeryczny telefonu alarmowego	EU-wide emergency number: 112

2. HAZARD IDENTIFICATION

Classification of the substance/mixture	
GHS Classification	Not applicable
Label elements	
Hazard symbols	not applicable
Signal words	not applicable
Hazard statements	not applicable
Precautionary statements	Prevention not applicable. Response not applicable. Storage not applicable. Disposal not applicable
Other hazards	
NFPA grade (0 ~ 4 level) Health: 0; Flammability: 0; Reactivity: 0 Section	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances		Not applicable
Mixtures		
Chemical Name	CAS No.	Content (%)
Poly-4, 4'-isopropylidenediphenyl carbonate	24936-68-3	45 – 55
2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene	9003-56-9	45 – 55
Additive*	-	< 5

*Other ingredients which do not contribute to classification of the product

4. FIRST AID MEASURES

Eye contact	Do not rub eyes. Immediately flush with plenty of water for at least 15 minutes and call a doctor/physician.
Skin contact	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Laundering enough contaminated clothing before reuse
Inhalation contact	When exposed to large amounts of steam and mist, move to fresh air. Take specific treatment if needed
Ingestion contact	About whether I 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

Extinguishing media	Suitable: dry chemical, carbon dioxide, regular foam extinguishing agent, spray. Unsuitable: avoid use of water jet for extinguishing
Special hazards arising from the substance or mixture	May ignite by heat, sparks, flames. Easy to burn, but not easy to fire. Irritating or toxic gases may occur by fire. Inhalation of materials may be harmful.

Advice for firefighters

Move containers from fire area, if you can do without the risk. Keep unauthorized personnel out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Notify your local fire station and inform the location of the fire and characteristics hazard. Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Ventilate closed spaces before entering. Move container to safe area from the leak area. Remove all sources of ignition. Handling the damaged containers or spilled material after wearing protective equipment.
Environmental precautions	Environmental precautions
Methods and material for containment and cleaning up	<p>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 regulations. Appropriate containers for disposal of spilled material collected.</p> <p>Small spills: appropriate container for disposal of spilled material collected. For disposal of spilled material in appropriate containers collected and clear surface.</p>
Reference to other sections	No additional information

7. HANDLING AND STORAGE

Precautions for safe handling	Avoid direct physical contact. Comply with all applicable laws and regulations for handling. Do not handle until all safety precautions have been read and understood. Operators should wear antistatic footwear and clothing.
Conditions for safe storage, including any incompatibilities	Save in cool, dry and well ventilated place. Do not use damaged containers. Save applicable laws and regulations. Please pay attention to incompatibilities material and conditions to avoid. Keep sealed when not in use.
Specific end use(s)	None

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters	Exposure limits ACGIH TLV – not available
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Engineering controls

A system of local and/or general exhaust is recommended to keep employee above the Exposure 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. Follow the appropriate engineering controls because unconfirmed gases for hazard among extrusion process may expose.

Exposure controls

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 respirator with a corpuscle filter of high efficiency. Any respiratory protection with a electromotion fan (for mist, dust, 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 a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

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.

Hand protection

Wear appropriate glove.

Skin protection

Wear appropriate clothing

Others

Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

solid (filament).

Odor

odourless.

Odor threshold

not applicable.

pH

not applicable.

Melting point/Freezing point

not applicable.

Initial Boiling Point/Boiling Ranges

not applicable.

Flash point

not applicable.

Evaporation rate

not applicable.

Flammability (solid, gas)	not applicable.
Upper/Lower Flammability or explosive limits	not applicable.
Vapour pressure	not applicable.
Solubility	insolubility (in water).
Vapour density	not applicable.
Specific gravity	1.05 ~ 1.35
Partition coefficient of n-octanol/water	not applicable.
Autoignition temperature	not applicable.
Decomposition temperature	over 400°C
Viscosity	not applicable.
Molecular weight	10 000 ~ 80 000 (main substance)

10. STABILITY AND REACTIVITY

Reactivity	This material is stable under recommended storage and handling conditions.
Chemical stability	This material is stable under conditions at room temperature and normal pressure.
Possibility of hazardous reactions	Hazardous polymerization will not occur. Containers may explode if heated. Easy to burn, but not easy to fire. Irritating or toxic gases may occur by fire. Inhalation of materials may be harmful.
Conditions to avoid	Avoid contact with incompatible materials and condition. Avoid: accumulation of electrostatic charges, heating, flames and hot surface
Incompatible materials	Combustible materials, irritating, toxic gases.
Hazardous decomposition products	Not available

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral – not available Dermal – not available Inhalation – not available
Skin corrosion/irritation	Not available

Eye corrosion/irritation	Zgodnie z kryteriami klasyfikującymi Unii Europejskiej produkt nie jest uznawany za drażniący oczy
Respiratory sensitization	Not available
Skin sensitization	Not available
Mutagenicity	Not available
Carcinogenicity	IRAC – not available. OSHA – not available. ACGIH – not available. NTP – not available. EU 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

Toxicity	Fish [2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene] : LC50 11.5 mg/l 96 hr Pimephales promelas Crustaceans Not available. Algae Not available.
Persistence and degradability	Persistence – not available. Degradability – not available.
Bioaccumulative potential	Bioaccumulative potential – not available. Biodegradation – not available
Mobility in soil	Not available
Results of PBT and vPvB assessment	Not available.
Other adverse effects	Other adverse effects

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.

14. TRANSPORT INFORMATION

Un number	Not available
UN proper shipping name	Not available
Transport hazard class(es)	Not available
Packing group	Not available
Environmental hazard	Not available
Special precautions for user	Local transport follows in accordance with Dangerous goods 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. ADR/RID: not regulated as dangerous goods. IATA: not regulated as dangerous goods. IMDG: not regulated as dangerous goods.
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	
POPs Management Law	<ul style="list-style-type: none"> not applicable.
Information of EU Classification	<ul style="list-style-type: none"> Classification - not applicable. Risk Phrases - not applicable. Safety Phrase - not applicable
US Federal regulations	<ul style="list-style-type: none"> OSHA PROCESS SAFETY (29CFR1910.119) - not applicable. CERCLA Section 103 (40CFR302.4) - not applicable. EPCRA Section 302 (40CFR355.30) - not applicable. EPCRA Section 304 (40CFR355.40) - not applicable. EPCRA Section 313 (40CFR372.65) - not applicable.
Rotterdam Convention listed ingredients	not applicable
Stockholm Convention listed ingredients	not applicable

Montreal Protocol listed ingredients	not applicable
Chemical safety assessment	No additional information

16. OTHER INFORMATION

Indication of changes	No additional information
Abbreviations and acronyms	<p>ACGIH American Conference of Governmental Industrial Hygienists CCRIS Chemical Identification/Dictionary</p> <p>ChemIDplus Chemical Identification/Dictionary</p> <p>CICADs Concise International Chemical Assessment Documents CPDB Carcinogenic Potency Database</p> <p>CTD Comparative Toxicogenomic Database</p> <p>ERG Emergency Response Guidebook</p> <p>ESIS European Chemical Substances Information System HSDB Hazardous Substances Data Bank</p> <p>IARC International Agency for Research on Cancer ICSCs International Chemical Safety Cards</p> <p>IRIS Integrated Risk Information</p> <p>IUCLID International Uniform Chemical Information Database JECFA Joint Expert Committee on Food Additives</p> <p>NLM National Library of Medicine</p> <p>NTP Nation Toxicity Program</p> <p>PDs Pesticide Documents</p> <p>KOSHA Korea Occupational safety & Health Agency.</p>

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 information
Training advice	No additional information.

Dalsze informacje

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