## SAFETY DATA SHEET



# **PET-G-32**

UPDATE: 1.09.2020

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

1.1. Product identifier Trade name Filament PET-G-32 1,75mm; Filament PET-G-32 2,85mm

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

1.2.1. Relevant identified uses Thermal processing: FDM/FFF

1.2.2. Uses advised against Not available.

1.3. Company

Producent/Dostawca: Omni3d sp z o.o. Adres: ul. Św Michała 43 Poznań 61-119

Telefon: 886 618 690

Adres e-mail: sales@omni3d.com

1.4. Emergency telephone number EU-wide emergency number: 112

## 2. HAZARD IDENTIFICATION

## 2.1. Classification of the substance/mixture

The substance is not classified as dangerous according to Regulation (EC) No 1272/2008 (CLP/GHS)

## 2.2. Label elements

Hazard Pictogram: None Signal Word: None

Hazard Statements: None

**Precautionary Statements: None** 

## 2.3. 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 higer.





## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Substance Name Co-polyester

Concentration (%) > 99,9

Classification Regulation EC No 1272/2008 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.

#### 3.2. Mixtures

Not applicable.

## 4. FIRST AID MEASURES

## 4.1. Description of 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.

#### <u>Ingestion</u>

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.

## 4.2. Most important symptoms and effects, both acute and delayed

No data available.

## 4.3. 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

## 5.1. Extinguishing media

Suitable extinguishing media: use an extinguishing agent suitable to local circumstances and the surrounding environment. Example: water spray, dry chemical powder and carbon dioxide. Unsuitable extinguishing media: do not use water, if fire is caused by an electrical short circuit.

## 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: carbon monoxide, carbon dioxide, acetaldehyde.





## 5.3. Advice for firefighters

Unusual fire and explosion hazards: powder material may form explosive dust-air mixtures.

High voltage static electricity build-up an 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. ACCIDENTAL RELEASE MEASURES

## 6.1. Personal precautions, protective equipment and emergency procedures

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.

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".

#### 6.2. Environmental precautions

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).

## 6.3. Methods and material for containment and cleaning up

Vacuum or sweep up material and place in a container for recuperate or disposal. Avoid dust generation.

#### 6.4. Reference to other sections

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

#### 7. HANDLING AND STORAGE

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).

## 7.1. Precautions for safe handling

Protective measures: put on appropriate personal protective equipment (see Section 8). 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.

#### 7.2. Conditions for safe storage, including any incompatibilities

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.

## 7.3. Specific end use(s)

Recommendations: not available.

Industrial sector specific solutions: not available.





## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

#### 8.1. Control parameters

Occupational exposure limits: no exposure limit value known.

#### 8.2. Exposure controls

## Appropriate engineering controls

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. <a href="Individual protection measures">Individual protection measures</a>

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 perform 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

#### 9.1. Information on basic physical and chemical properties

Appearance	solid (filament).
Odour	slight.
Odour threshold	not available.
рН	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 <sup>3</sup>
Solubility (ies)	insoluble in water.
Auto-ignition temperature	not applicable.
Decomposition temperature	not applicable.
Explosive properties	not applicable.
Oxidizing properties	not applicable.

## 9.2. Other information

No additional information.





## 10. Stability and reactivity

#### 10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

## 10.2. Chemical stability

The product is stable.

#### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will nor occur.

#### 10.4. Conditions to avoid

No specific data.

#### 10.5. 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.

#### 10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, acetaldehyde.

## 11. TOXICOLOGICAL INFORMATION

## 11.1. Acute toxicity

Information on the likelyroutes of exposure

Inhalation: combustion products may be irritant. High concentration of dust may be irritant to the respiratory tract.

Ingestion: expected to be a low ingestion hazard.

Skin contact: may cause physical abrasion in contact with skin. Molten polymer will adhere to the skin causing deep thermal burns.

Eye contact: may cause physical abrasion in contact with eyes.

#### 11.2. Skin corrosion/irritation

No known significant effects or critical hazards.

## 11.3. Eye corrosion/irritation

No known significant effects or critical hazards.

## 11.4. Respiratory sensitization

No known significant effects or critical hazards.

## 11.5. Skin sensitization

No known significant effects or critical hazards.

#### 11.6. Mutagenicity

No known significant effects or critical hazards.





## 11.7. Carcinogenicity

No known significant effects or critical hazards.

## 11.8. Reproductive toxicity

No known significant effects or critical hazards.

11.9. Specific target organ toxicity (single exposure)

Not available.

11.10. Specific target organ toxicity (repeated exposure)

Not available.

#### 11.11. Aspiration hazard

No known significant effects or critical hazards.

## 12. ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Not available.

12.2. Persistence and degradability

Not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Soil/water partition coefficient (KOC): insoluble in water. Mobility: not available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

No known significant effects or critical hazards.

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

## Product

Methods of disposal: like most thermoplastics, the product can be recycled. Can be landfilled or incinerated, when in compliance with local regulations.

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.

#### <u>Packaging</u>

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).

14.1. Un number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

None

14.4. Packing group

Not applicable.

14.5. Environmental hazard

Not applicable.

14.6. Special precautions for user

None

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

Not applicable.

## 15. REGULATORY INFORMATION

15.1. 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.

15.2. Chemical safety assessment

Not available.





#### 16. OTHER INFORMATION

## 16.1. Indication of changes

Not applicable

#### 16.2. Abbreviations and acronyms

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.

## 16.3. 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.

## 16.4. Relevant R phrases and H statements

No additional data.

#### 16.5. Training advice

No additional data.

#### 16.6. Further information

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