

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY/UNDERTAKING**1.1 Product Identifier**

Product name: ePET 3D Printer Filament (PETg based)

1.2 Recommended use of the chemical and restrictions on use

Recommended Use : For use in FFF/FDM 3D printing machines

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: 3Dink Inc.

Supplier Address: 349-20 Hwahap-ro 1080beon-gil Yangju-si Gyeonggi-do Republic of Korea

Telephone number: +82-10-9002-9700 / +82-10-6671-0010

Email: plasilkorea@gmail.com

1.4 Emergency Telephone Number

Emergency Telephone: +82-10-9002-9700 / +82-10-6671-0010 (Korean only)

Opening hours: 10:00~18:00 (UTC+09)

SECTION 2 HAZARDS IDENTIFICATION**2.1 GHS classification of the substance/mixture**

Not classified

2.2 GHS label elements, including precautionary statements

Pictogram and symbol : Not applicable

Signal word : Not applicable

Hazard statements : Not applicable

Precautionary statements

Precaution : Not applicable

Treatment : Not applicable

Storage : Not applicable

Disposal : Not applicable

2.3 Other hazard information not included in hazard classification (NFPA)

Health : Not available

Flammability : Not available

Reactivity : Not available

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Mixtures**

Substance Name	Usual Name	CAS No	Weight(%)
Copolyester	PETg	25038-91-9	100

SECTION 4 FIRST-AID MEASURES**4.1 Description of first aid measures**

Eye contact

- Seek medical attention if eye symptoms occur.

- In case of contact with molten substance, immediately flush eyes with water for at least 15 minutes. Seek medical attention immediately.

Skin contact

- Remove and isolate contaminated clothing and shoes.
- Seek medical attention if skin symptoms occur.
- If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.
- Wash contaminated clothing and shoes before reuse.

Inhalation : Not available

Ingestion

- Get medical attention if substance is ingested.

4.2 Indication of immediate medical attention and special treatment needed

Call emergency medical service. Seek medical advice/attention if needed.

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Cool as quickly as possible with water If burned by contact with molten material. AND then go to see a physician for treatment of burns.

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media :

CO₂, water, sand

Unsuitable extinguishing media :

Avoid use of water jet for extinguishing

5.2 Specific hazards arising from the chemical

- Thermal decomposition products: Not available
- Hazardous combustion products: CO₂, CO
- Unusual fire and explosion hazards : No explosion hazards.

5.3 Special protective equipment and precautions for fire-fighters

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural fire fighters' protective clothing will only provide limited protection.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Stop leak if you can do it without risk.

Isolate exposed area.

Keep unauthorised personnel away.

Use certificated protective equipment.

Ventilate the leaked area.

6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Do not touch or walk through spilled material.

6.4 Reference to other sections

See also sections 8 and 13 of this Safety Data Sheet.

of tank.

SECTION 7 ACCIDENTAL RELEASE MEASURES

7.1 Precautions for safe handling

Avoid contact with molten material.

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures.

7.2 Conditions for safe storage, including any incompatibilities

Keep container closed.

Store container in a well dry/cool place.

Keep away from waterways and sewers.

Keep away from any source of ignition.

SECTION 8 ACCIDENTAL RELEASE MEASURES

8.1 Occupational Exposure limits

Korea regulation : Not applicable

ACGIH regulation : Not applicable

Biological exposure index : Not applicable

OSHA regulation : Not applicable

NIOSH regulation : Not applicable

EU regulation : Not applicable

Other : Not applicable

8.2 Appropriate engineering controls

- Provide local exhaust ventilation system or other engineering controls to keep any airborne contamination below the respective threshold limit value.

- Check legal suitability of exposure level.

8.3 Personal protective equipment

Respiratory Protection

- Wear NIOSH approved full or half face piece (with goggles) respiratory protective equipment when necessary.

Eye protection

- An eye wash unit and safety shower station should be available nearby work place.

- Wear safety glasses to protect eyes when working with molten material..

Hand protection

- It is a good industrial hygiene practice to minimize skin contact.

- When material is heated, wear gloves to protect against thermal burns

Body protection

- It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Description : Solid(Filament)

Appearance Color : Varies

Odor : Very slight odor

Odor threshold : Not applicable

pH : Not applicable
Melting point/freezing point : Not applicable
Initial boiling point and boiling range : Not applicable
Flash point : Not available
Evaporation rate : Not available
Flammability (solid, gas) : Not available
Upper/lower flammability or explosive limits : Not available
Vapor pressure : Negligible (20°C)
Solubility (ies) : Negligible
Vapor density : Not available
Specific gravity : > 1(density: 1.27g/ml (25 °C))
Partition coefficient: n-octanol/water : Not available
Auto ignition temperature : 454 °C (ASTM E659)
Decomposition temperature : Not available
Viscosity : Not available
Molecular weight : Not available

9.2 Other information :

Not available

SECTION 10 STABILITY AND REACTIVITY

- 10.1 Chemical stability : Stable
- 10.2 Possibility of hazardous reactions: None Known
- 10.3 Conditions to avoid: None Known
- 10.4 Incompatible materials: Not available
- 10.5 Hazardous decomposition products: Not available

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

- Oral : None known
- Dermal : Not available
- Inhalation : Not available

Skin corrosion/ irritation : Molten material will produce thermal burns

Serious eye damage/ irritation : Molten material will produce thermal burns

Respiratory sensitization : Not available

Skin sensitization : Not available

Carcinogenicity : Not classified

KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008: Not listed

Mutagenicity : Not available

Specific target organ toxicity (single exposure) : Not available

Specific target organ toxicity (repeat exposure) : Not available

Aspiration Hazard : Not available

SECTION 12 ECOLOGICAL INFORMATION

12.1 Ecological toxicity

- Acute toxicity : Not available

- **Chronic toxicity** : Not available
- Fish** : Not available
- crustacean** : Not available
- Algae** : Not available

12.2 Persistence and degradability

- Persistence** : Not available
- Degradability** : Not available

12.3 Bioaccumulative potential

- Bioaccumulation** : Not available
- Biodegradation** : Not available

12.4 Mobility in soil : Not available

12.5 Other hazardous effect : Not available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Disposal method

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

13.2 Disposal precaution

Consider the requirements of any applicable waste treatment management regulation.

SECTION 14 TRANSPORT INFORMATION

14.1 UN Number : Not regulated as a hazardous material.

14.2 UN Proper shipping name : Not applicable

14.3 Transport Hazard class : Not applicable

14.4 Packing group : Not applicable

14.5 Marine pollutant : Not applicable

14.6 Special precautions

- in case of fire : Not applicable
- in case of leakage : Not applicable

SECTION 15 REGULATORY INFORMATION

15.1 US Regulatory information

- U.S.A management information (OSHA Regulation) : Not regulated
- U.S.A management information (CERCLA Regulation) : Not regulated
- U.S.A management information (EPCRA 302 Regulation) : Not regulated
- U.S.A management information (EPCRA 304 Regulation) : Not regulated
- U.S.A management information (EPCRA 313 Regulation) : Not regulated

15.2 International Regulatory Information

Korea regulatory Information

- Occupational Safety and Health Regulation : Not regulated
- Toxic Chemical Control Act : Non-Toxic Chemicals (97-3-186)
- Dangerous Material Safety Management Regulation : Not regulated
- Waste Control Act : Not regulate

External information

- EU classification (classification) : Not regulated
- EU classification (risk phrases) : Not regulated

EU classification (safety phrases) : Not regulated

EU SVHC list : Not regulated

EU Authorisation List : Not regulated

EU Restriction list : Not regulated

Persistent Organic Pollutants Acts : Not regulated

Japan management information Existing and New Chemical Substances (ENCS): (7)-714

China management information Inventory of Existing Chemical Substances (IECSC): Present 01980

Canada management information Domestic Substances List (DSL): Present

Australia management information Inventory of Chemical Substances (AICS): Present

Substance of Rotterdam Protocol : Not regulated

Substance of Stockholm Protocol : Not regulated

Substance of Montreal Protocol : Not regulated

SECTION 16 OTHER INFORMATION

16.1 Information source and references

16.2 Issuing date : 01/June/2017

16.3 Revision number and date

revision number : 01/June/2017

date of the latest revision : 01/June/2017

16.4 Others

Revised Material Safety Data Sheet based on the amendments made on the Ministry of Employment and Labor Public Notice on Standard for Classification Labeling of Chemical Substance and Material Safety Data Sheet.

This SDS is authored in pursuant to the Article 41 of the Occupational Safety and Health Act.

The content is based on the latest information and knowledge that we currently possess.

This SDS was authored to aid buyer, processor or any other third person who handles the chemical of subject in the SDS; additionally, it does not warrant suitability of the chemical for any particular purposes or the commercial use of statements that approves the use of it in combination with other chemicals as well as technical or legal liabilities.