

1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

PARAMOUNT 3D PETG 3D Printer Filament

Synonyms

Polyethylene-Terephthalate-Glycol-Modified

Chemical Family

Polymer, Copolymer

Product Use

3D Printing

Restrictions on Use

Do not use where temperatures exceed 250°C.

Details of Supplier of MSDS

PARAMOUNT 3D

907 N Central Avenue

Wood Dale, IL 60191

USA

Phone No: +1 (630) 594-1840 (8-5 CST)

E-mail: msds@paramount-usa.com

Emergency Poison Control (24-hr hotline): +1 (800) 222-1222

2 - HAZARDS IDENTIFICATION

Classification of the substance

Not a hazardous substance.

GHS Label elements, including precautionary statements

Not a hazardous substance.

Hazards not otherwise classified (HNOC) or not covered by GHS

None.

Disposal

Dispose in accordance with local/regional/national/international regulations.

3 - COMPOSITION

CAS Component Name Percent

Poly(ethylene terephthalate-co-1,4-cyclohexylenedimethylene terephthalate) > 95
(25640-14-6)

4 - FIRST AID MEASURES

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Skin

Wash off with soap and plenty of water.

Eyes

Flush eyes with water as a precaution.

Ingestion

Rinse mouth with water.

Indication of any immediate medical attention and special treatment needed

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

Most Important Symptoms/Effects

Acute

Molten material may cause thermal burns.

Delayed

No information on significant adverse effects.

Note to Physicians

Treat symptomatically.

Antidote

None known. Treat symptomatically.

Material: PARAMOUNT 3D PETG 3D Printer Filament

5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water, alcohol-resistant foam, dry chemical or CO₂.

Unsuitable Extinguishing Media

None known.

Special Hazards Arising from the Chemical

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Fighting Measures

Wear full protective fire-fighting gear including self-contained breathing apparatus for protection against possible exposure.

Special Protective Equipment and Precautions for Firefighters

Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

No measures required.

Methods and Materials for Containment and Cleaning Up

Collect spilled material in appropriate container for reuse or disposal. Dispose in accordance with all applicable regulations.

Environmental Precautions

Avoid release to the environment. Comply with all applicable regulations on spill and release reporting. Prevent entry into waterways, sewers, basements, or confined areas.

7 - HANDLING AND STORAGE

Precautions for Safe Handling

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges.

Material: PARAMOUNT 3D PETG 3D Printer Filament

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria. Store in a cool dry place. Store below 50 °C. Avoid heat, flames, sparks and other sources of ignition.

Incompatible Materials

N/A

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**Component Exposure Limits**

Poly(ethylene terephthalate-co-1,4-cyclohexylenedimethylene terephthalate)
(25640-14-6)

ACGIH:

Contains no substances with occupational exposure limit values.

OSHA (US):

Contains no substances with occupational exposure limit values.

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures:

There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI):

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust ventilation system. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual Protection Measures, such as Personal Protective Equipment**Eye/face protection**

None during normal use. Protect against molten solid.

Skin Protection

None during normal use. Protect against molten solid.

Respiratory Protection

No respirator is required under normal conditions of use. If respirable dust is generated, respiratory protection may be needed.

Material: PARAMOUNT 3D PETG 3D Printer Filament

Glove Recommendations

Protect against molten solid. In the molten form, wear protective gloves.

9 - PHYSICAL AND CHEMICAL PROPERTIESAppearance *Monofilament*Physical State *Solid*Odor *None*Color *Opaque*Odor Threshold *Not applicable*pH *Not available*Melting Point *220 - 260 °C*Boiling Point *Not available*Freezing point *Not available*Evaporation Rate *Not available*Boiling Point Range *Not available*Flammability (solid, gas) *Not available*Auto-Ignition *454 °C*Flash Point *Not available*Lower Explosive Limit *Not applicable*Decomposition *>380 °C*Upper Explosive Limit *Not applicable*Vapor Pressure *Not available*Vapor Density (Air=1) *Not available*Specific Gravity (H₂O=1) *Not available*Water Solubility *Insoluble*Partition Coefficient *Not available*Viscosity *Not available*Solubility (Other) *Not available*Density *1.23 g/cc*Molecular Weight *Not available***10 - STABILITY AND REACTIVITY****Reactivity**

The product is chemically stable under recommended conditions of storage, use and temperature.

Chemical Stability

Stable under normal conditions of use.

Material: PARAMOUNT 3D PETG 3D Printer Filament

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid contact with temperatures above 380 °C.

Incompatible Materials

Oxidizing agents.

Hazardous decomposition products

Oxides of carbon.

Thermal decomposition products

May decompose upon heating to produce corrosive and/or toxic fumes.

11 - TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure****Inhalation**

No hazard is expected from the normal use of this product. Dust may cause irritation of the nose, throat and upper respiratory tract.

Skin Contact

Molten material may cause burns.

Eye Contact

Molten material may cause burns.

Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity**Immediate Effects**

Molten material may cause thermal burns.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

No data available.

Material: PARAMOUNT 3D PETG 3D Printer Filament

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

Germ Cell Mutagenicity

Negative in the Ames test for mutagenicity.

Tumorigenic Data

No data available.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

No data available.

12 - ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Material: PARAMOUNT 3D PETG 3D Printer Filament

13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations. Avoid release to the environment. Incineration should be done in accordance with prevailing municipal, state, and federal laws and standards from local environmental agencies.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

14 - TRANSPORT INFORMATION

DOT (US) Not dangerous goods.

IMDG Not dangerous goods.

IATA Not dangerous goods.

15 - REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Poly(ethylene terephthalate-co-1,4-cyclohexylenedimethylene terephthalate)
CAS-No. 9051-89-2

New Jersey Right To Know Components

Poly(ethylene terephthalate-co-1,4-cyclohexylenedimethylene terephthalate)
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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16 - OTHER INFORMATION**NFPA Ratings**

Health: 0 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PARAMOUNT 3D shall not be held liable for any damage resulting from handling or from contact with the above product.