

PEEK · Safety Data Sheet

In accordance with paragraph (d) of 29 CFR 1910.1200:2012 Regulation (EU) No. 1907/2006

Section 1. Chemical Product and Company identification

Product Name

Smart3D PEEK

Importer

Industry Supplies, Inc.
2035 Sunset Lake Road Newark, Delaware 19702 USA.
Email: support@smart3d.tech
USA Emergency Poison Control Hot Line (24/7): 1 (800) 222-1222 or call your LOCAL POISON CONTROL CENTER

Section 2. Hazards Identification

GHS Classification

Not applicable

Precautionary statements

GHS label elements Hazard symbols

None needed

Prevention

Not available

Signal word

None needed

Response

Not available

Hazard statement

The mixture does not meet the criteria for classification

Storage

Not available

EU Classification

Classification of substance or mixture

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended

OSHA Regulatory Status

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulation.

Other hazards

NFPA rating: (0-4 steps) Health=1, Flammability=0, Reactivity=0

Section 3. Composition

Chemical name

Polyether ether ketone

Product use

Monofilament for FFF 3D Printing

Chemical family

Polymer, thermoplastic

Contents (%)

>98

Section 4. First-Aid Measures

Inhalation

Not likely, due to the form of the product. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Skin contact

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. Do not peel polymer from the skin.

Eye contact

Not likely, due to the form of the product. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.

Ingestion

Not likely, due to the form of the product.

Notice to physician

It is unlikely that first aid shall be needed if the product is used under ordinary conditions. Treat symptomatically according to victim's conditions and specifics of incident.

Antidote

None known. Treat symptomatically and supportively.

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Section 5. Fire-fighting measures

Flammability

Autoignition temperature: Not self-igniting

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific 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.

Hazardous combustion products

During fire, gases hazardous to health may be formed.

Fire fighting procedures and equipments

Wear appropriate personal protective equipment (see section 9. EXPOSURE CONTROLS/PERSONAL PROTECTION). Avoid inhalation of smoke or gas when fire fighting. Use self contained breathing apparatus (SCBA) for protection against possible exposure. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Move container from fire area if it can be done without risk. Cool containers with water until well after fire is out.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency procedures

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

Methods and Materials for Containment and Cleaning Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

Environmental Precautions

Avoid discharge into drains, water courses or onto the ground.

Section 7. Handling and Storage

Handling

Observe good industrial hygiene practices.

Storage

Store in tightly closed container.

Incompatible materials

Store away from incompatible materials (see Section 10 of the SDS).

Section 8. Exposure Controls / Personal Protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

Not available.

Predicted no effect concentrations (PNECs)

Not available.

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Section 8. Exposure Controls / Personal Protection

Appropriate engineering controls

Good general ventilation (typically 10 airchanges per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye / face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Wear appropriate chemical resistant gloves. Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and /or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls

Environmental manager must be informed of all major releases.

Section 9. Physical & Chemical Properties

Appearance

Monofilament, spool

Vapour pressure

Not available

Physical State

Solid

Solubility

Insoluble

Odor

Slight

Vapour density (Air=1)

Not available

pH

Not available

Relative density

1.2 - 1.4

Melting point

345°C

Partition coefficient of n-octanol/water

Not available

Initial Boiling Point/Boiling Ranges

Not available

Autoignition Temperature

Not available

Flash point

Not available

Decomposition Temperature

Not available

Evapourating Rate

Not available

Viscosity

Not available

Flammability (solid, gas)

Not available

Molecular weight

Not available

Upper/Lower Flammability or explosive limits

Not available

Oxidising properties

Not oxidising

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Section 10. Stability & Reactivity

Reactivity / Stability

This product is chemical stable under recommended storage, handling, use and temperature conditions.

Possibility of hazardous reaction

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

Materials to avoid

Strong oxidizing agents such as liquid chlorine and concentrated oxygen.

Hazardous decomposition products

Carbon monoxide, carbon dioxide.

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation

Based on available data, the classification criteria are not met.

Ingestion

May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Eye/Skin

Based on available data, the classification criteria are not met.

Genotoxicity

No data available. Not expected to be harmful.

Medical conditions aggravated by exposure

No data available. Not expected to be harmful.

Section 12. Ecological Information

Ecotoxicity

No data available

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Mobility

Not a PBT or vPvB substance or mixture. No data available

Section 13. Disposal Considerations

Disposal methods

Dispose of contents/container in accordance with applicable local, regional, national, and/or international laws and 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.

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Section 14. Transport Information

ADR
Not regulated as dangerous goods

IATA
Not regulated as dangerous goods

RID
Not regulated as dangerous goods

IMDG
Not regulated as dangerous goods

ADN
Not regulated as dangerous goods

Section 15. Regulatory Information

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended
Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Not listed

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

Disclaimer:

This SDS, based on current knowledge and experience, contains a general summary of hazards and is consistent with the information provided by the supplier. No liability can be assumed for the accuracy and completeness of this information. The information in this SDS applies for this specific material only. It therefore does not apply for its usage in combination with other materials or ways of processing. It is user's responsibility to read and understand this information and incorporate it into individual safety programs, according to all legal and regulatory applicable procedures. Smart International gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the user shall determine the quality and suitability of the product.

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