Raise3D Premium PC Safety Data Sheet

Prepared in accordance with Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878, and Regulation (EC) No 1272/2008 (CLP).

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Trade name: Raise3D Premium PC 3D Printing Filament

Other means of identification: UFI not assigned / not applicable based on available information for this non-classified mixture.

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

Relevant identified use: FDM/FFF 3D printing filament for industrial and professional use.

Uses advised against: Any use other than the identified use.

1.3 Details of the supplier of the safety data sheet

Supplier: Raise 3D Technologies, Inc.

Address: 13310 Pike Road, Stafford, TX 77477

Manufacturer address: Building A1, Huanghai Road, Tongzhou District, Nantong City, Jiangsu Province 226300, China

E-mail address of competent person responsible for the SDS: minde.jin@raise3d.com

Note: If this product is placed on the EU market through a different EU importer/distributor, Section 1.3 should be updated to show the most recent EU supplier details before external issue.

1.4 Emergency telephone number

Emergency information service: +86-021-65337855

Additional contact: +1 888 963 9028

Additional advice: For medical emergencies contact local poison centre or physician. Any service limitations should be stated by the supplier when distributing this SDS.

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]: This mixture is not classified as hazardous.

Regulation (EC) No 1272/2008 [CLP]	Result
Hazard classes / categories	Not classified

Hazard statements	Not applicable

2.2 Label elements

Hazard pictograms: None

Signal word: None

Hazard statements: Not applicable

Precautionary statements: Not applicable

Supplemental label information: Not applicable

2.3 Other hazards

• Processing (e.g. printing, cutting, grinding) may generate dust or thermal decomposition fumes; avoid inhalation.

• Contact with molten material may cause severe thermal burns.

• Based on available information, the mixture does not contain substances meeting the criteria for PBT or vPvB in concentrations of 0.1 % or greater.

• Based on available information, the mixture does not contain substances identified as having endocrine-disrupting properties for human health or the environment in concentrations of 0.1 % or greater.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical name	CAS No.	EC No.	REACH Reg. No.	Concentration	Classification (CLP)	Notes
Polycarbonate	25037-45-0	N/A	Not applicable (polymer)	90 % - 100 %	Not classified	Main polymer constituent

Other components: Based on currently available information, no additional ingredient is present at a concentration requiring disclosure in this section as a hazardous component under REACH Annex II / CLP.

Specific concentration limits (SCL), M-factors and acute toxicity estimates (ATE): Not applicable / not available for the disclosed component.

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice: If symptoms persist or in case of doubt, seek medical attention. Show this safety data sheet to the physician where possible.

Inhalation: If dust or fumes are inhaled, move the person to fresh air. Keep at rest. Seek medical attention if irritation or symptoms persist.

Skin contact: Wash with soap and water. If contact with molten material occurs, cool affected area immediately with plenty of water. Do not remove solidified material from the skin. Seek medical attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists or if hot material contacts the eye.

Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical advice if discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed

Under normal conditions of use no significant acute or delayed adverse effects are expected. Dust or fumes from processing may cause respiratory irritation. Molten material can cause thermal burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water spray, foam, dry chemical powder or carbon dioxide. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: No specific restrictions known.

5.2 Special hazards arising from the substance or mixture

The product itself is not classified as flammable; however, combustible organic vapours and decomposition products may be released in a fire. Hazardous combustion products may include carbon monoxide, carbon dioxide and other irritating organic fumes.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective equipment. Cool exposed containers with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust generation and inhalation during clean-up. Wear suitable personal protective equipment as described in Section 8. Spilled filament may create a slipping hazard.

6.2 Environmental precautions

Prevent entry into drains, surface water and soil. Collect mechanically.

6.3 Methods and material for containment and cleaning up

Sweep or pick up material and place in suitable containers for recovery or disposal. Clean contaminated area after removal of material.

6.4 Reference to other sections

See Sections 7, 8 and 13.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation during printing and any heated processing. Avoid inhalation of dust, fumes and vapours generated during thermal processing. Avoid contact with molten material. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place. Keep container or packaging closed when not in use. Protect from moisture, direct sunlight and excessive heat. Keep away from strong oxidising agents.

Recommended storage temperature: 0 °C to 40 °C

7.3 Specific end use(s)

3D printing filament for additive manufacturing.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits: No EU occupational exposure limit values have been identified for the mixture as supplied based on available information.

DNEL / PNEC: Not available for the mixture.

8.2 Exposure controls

Appropriate engineering controls: Use adequate general ventilation. Local exhaust ventilation is recommended where fumes or airborne particles may be generated during processing.

Eye / face protection: Safety glasses are recommended during handling, cutting or cleaning operations.

Hand protection: Protective gloves are recommended for routine handling. Use heat-resistant gloves when handling hot or molten material.

Skin / body protection: Normal work clothing. Wear suitable protective clothing when handling heated material.

Respiratory protection: Not normally required under normal handling conditions. If ventilation is insufficient during processing, use suitable respiratory protection in accordance with local regulations.

Environmental exposure controls: Avoid release to the environment.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid filament
Colour	Transparent
Odour / odour threshold	Odourless / odour threshold not available
Melting point / freezing point	Not applicable as a discrete value for the supplied polymer; softening range approximately 110 - 150 °C
Boiling point or initial boiling point and boiling range	Not applicable (solid polymer)
Flammability	Not classified; data not available for the mixture as supplied
Lower and upper explosion limit	Not applicable
Flash point	Not applicable (solid polymer)
Auto-ignition temperature	> 450 °C
Decomposition temperature	Onset of decomposition > 380 °C
pH	Not applicable (insoluble solid)
Kinematic viscosity	Not applicable (solid polymer)
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	Not available
Vapour pressure	Not applicable (solid polymer)
Density and/or relative density	Approx. 1.2 g/cm³; relative density approx. 1.2
Relative vapour density	Not applicable (solid polymer)
Particle characteristics	Not applicable for the supplied filament form

9.2 Other information

9.2.1 Information with regard to physical hazard classes: The mixture is not classified for physical hazards according to CLP. No additional physical-hazard test data are available for inclusion.

9.2.2 Other safety characteristics: No further relevant safety characteristics known.

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reactivity known under recommended storage and handling conditions.

10.2 Chemical stability

Stable under normal conditions of storage and use.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Excessive heat, open flames, thermal decomposition temperatures and dust generation from machining.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide and other irritating organic decomposition products.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity: Not classified based on available information

Skin corrosion / irritation: Not classified; molten material may cause thermal burns

Serious eye damage / irritation: Not classified; dust or particles may cause mechanical irritation

Respiratory or skin sensitisation: Not classified based on available information

Germ cell mutagenicity: Not classified based on available information

Carcinogenicity: Not classified based on available information

Reproductive toxicity: Not classified based on available information

STOT-single exposure: Not classified based on available information

STOT-repeated exposure: Not classified based on available information

Aspiration hazard: Not applicable for the solid supplied form

Likely routes of exposure during processing: inhalation of dust/fumes, skin and eye contact.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties: Based on available information, the mixture does not contain substances identified as having endocrine-disrupting properties for human health at concentrations of 0.1 % or greater.

11.2.2 Other information: No other relevant toxicological information available.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No specific ecotoxicological data are available for the mixture. The product is not expected to present an acute aquatic hazard as supplied.

12.2 Persistence and degradability

No specific data available for the mixture.

12.3 Bioaccumulative potential

No specific data available for the mixture.

12.4 Mobility in soil

Insoluble solid polymer. Mobility in soil is expected to be low.

12.5 Results of PBT and vPvB assessment

Based on available information, the mixture does not contain substances meeting the criteria for PBT or vPvB in concentrations of 0.1 % or greater.

12.6 Endocrine disrupting properties

Based on available information, the mixture does not contain substances identified as having endocrine-disrupting properties for the environment at concentrations of 0.1 % or greater.

12.7 Other adverse effects

No known significant adverse effects. Avoid uncontrolled release to the environment.

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents/container in accordance with local, regional, national and international regulations. Recover or recycle where possible. Otherwise dispose of through a licensed waste contractor. Incineration may be used where permitted.

Contaminated packaging: Empty packaging should be recycled or disposed of in accordance with applicable regulations.

Section 14: TRANSPORT INFORMATION

The product is not regulated as dangerous goods for transport.

Item	ADR/RID	ADN	IMDG	IATA
UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	Not regulated.	Not regulated.	Not regulated.	Not regulated.
Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.	Not regulated.
Packing group	Not regulated.	Not regulated.	Not regulated.	Not regulated.
Environmental hazards	No.	No.	No.	No.

Special precautions for user	None known; see Section 7.	None known; see Section 7.	None known; see Section 7.	None known; see Section 7.
Maritime transport in bulk according to IMO instruments	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

• Regulation (EC) No 1907/2006 (REACH), as amended.
• Regulation (EC) No 1272/2008 (CLP), as amended.
• This safety data sheet has been compiled in accordance with REACH Annex II as amended by Commission Regulation (EU) 2020/878.
• The mixture is not classified as hazardous according to Regulation (EC) No 1272/2008 [CLP].

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

Section 16: OTHER INFORMATION

Revision information

Revision date: 2026-04-26

Version: 6.0

Supersedes version: 5.2 (February 2023)

Indication of changes: Updated to the format and content requirements of REACH Annex II as amended by Commission Regulation (EU) 2020/878; Sections 1, 2, 3, 8, 9, 11, 12, 14, 15 and 16 revised; editorial harmonisation throughout.

Abbreviations and acronyms

• ADR: Agreement concerning the International Carriage of Dangerous Goods by Road
• ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
• ATE: Acute Toxicity Estimate
• CLP: Classification, Labelling and Packaging Regulation
• DNEL: Derived No-Effect Level
• IATA: International Air Transport Association
• ICAO: International Civil Aviation Organization
• IMDG: International Maritime Dangerous Goods Code
• PBT: Persistent, Bioaccumulative and Toxic

• PNEC: Predicted No-Effect Concentration
• REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
• RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
• UFI: Unique Formula Identifier
• vPvB: very Persistent and very Bioaccumulative

Key references: Supplier information, previous SDS version, REACH Annex II as amended by Commission Regulation (EU) 2020/878, and Regulation (EC) No 1272/2008 [CLP].

Disclaimer: The information in this safety data sheet is believed to be correct to the best of our knowledge at the revision date and is intended to describe the product for health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.