Raise3D Premium PVA+ 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: PRODUCT AND COMPANY IDENTIFICATION

1.1 Trade name:

Raise3D Premium PVA+ 3D Printing Filament

1.2 Use of the product:

Water-soluble support filament for FFF/FDM 3D printing

1.3 Supplier information:

Raise 3D Technologies, Inc.

Address:

13310 Pike Road, Stafford, TX 77477

Manufacturer address:

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

1.4 Emergency telephone number

Emergency information: In case of toxicological emergency, contact a doctor first.

Emergency phone number: +86-021-65337855

Contact person (E-mail): Dr. Jin (minde.jin@raise3d.com)

Only available during office hours (09:00-18:00)

Emergency contact information from Raise3D USA location:

United States

13310 Pike Road, Stafford, TX 77477

Tel: +1 888 963 9028.

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

No classification in accordance with the Regulation (EC) No. 1272/2008.

2.2 Label elements

No labelling required according to Regulation (EC) No. 1272/2008.
Hazard pictograms / signal word / hazard statements: Not applicable.

2.3 Other hazards

Processing may generate dust or thermal decomposition fumes; contact with molten material may cause thermal burns.
This mixture does not meet the criteria for PBT or vPvB and, based on available information, does not contain substances identified as endocrine disruptors at concentrations >= 0.1%.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical Name	Product identifier	%	Classification
Polyvinyl alcohol-based compound	CAS No.25213-24-5	>96	
Aliphatic polyol		<20	
Calcium distearate	CAS No: 1592-23-0	<2	Not classified
Methanol (impurity)	CAS No:67-56-1 EC No:200-659-6	<1	Flam. Liq. 2; H225, Acute Tox. 3; H301, Acute Tox. 3; H311, Acute Tox. 3; H331, STOT SE 1; H370

Section 4: FIRST AID MEASURES

General advice:

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

4.1 Description of first aid measures

4.1.1 If inhaled:

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.

4.1.2 In case of 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.

4.1.3 In case of 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.

4.1.4 If swallowed:

Not likely, due to the form of the product.

4.2 Most important symptoms and effects, both acute and delayed

Exposure may cause temporary irritation, redness, or discomfort.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1 General fire hazards

No unusual fire or explosion hazards noted.

5.2 Extinguishing media

Suitable extinguishing media:

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2).

Unsuitable extinguishing media:

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

5.3 Special hazards arising from the substance ormixture

During fire, gases hazardous to health may be formed.

5.4 Advice for firefighters

Special protective equipment for firefighters:

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

Special fire fighting procedures:

Move containers from fire area if you can do so without risk.

Specific methods:

Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

For emergency responders:

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

6.2 Environmental precautions

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

6.3 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.

6.4 Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid prolonged exposure. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3 Specific end use(s)

Not available.

7.4 Storage temperature

> 0 °C and <= 40 °C

7.5 Other data

No decomposition if stored and applied as directed.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components	CAS No.	Type	Value	Detail
Methanol (impurity)	67-56-1	STEL TWA TWA:	333 mg/m3 250 ppm 260 mg/m3 200 ppm 250 ppm 266 mg/m3 200 ppm	Indicative EU occupational exposure limit values (methanol)
Dust	-	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Totaldust.

8.2 Biological limit values

No biological exposure limits noted for the mixture.

8.3 Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Provide adequate ventilation during printing/processing. Wash hands before breaks and at the end of the workday.

8.4 Individual protection measures, such as personal protective equipment:

Eye/face protection: No special requirements.

Skin protection: No special requirements.
Respiratory protection: Not normally required. If dust or thermal decomposition fumes are generated, use suitable local exhaust ventilation or appropriate respiratory protection.
General hygiene considerations: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Item	Information
Appearance	Solid
Odour	Slight
Colour	Natural colour
Odour threshold	No information available
pH	Not available
Melting/freezing point	150-230 °C
Initial boiling point and boiling range	Not applicable
Flash point	Not available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure(20℃)	Not applicable
Vapour density	Not applicable
Relative density	Not available
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water, log Po/w)	Not available
Auto-ignition temperature	520 °C
Decomposition temperature	Not available
Viscosity, dynamic (mPa.s)	Not applicable

9.2 Other information

No additional relevant information available.

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity:

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability:

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions:

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

10.5 Incompatible materials:

Strong oxidising agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Component: Methanol (impurity), CAS No. 67-56-1

Acute toxicity

Acute oral toxicity: LD50 Oral: > 2,000 mg/kg

Acute inhalation toxicity: Acute toxicity estimate: > 20 mg/L

Test atmosphere: vapor

Exposure time: 4 h

Method: Calculation method

Acute dermal toxicity:

Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute toxicity (other routes of administration)methanol:

Species: rabbit

No skin irritation observed.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation

Respiratory or skin sensitisation

Not expected to cause respiratory or skin sensitisation.

Germ cell mutagenicity

No data available to indicate that the product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not classified as carcinogenic to humans.

Reproductive toxicity:

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

Teratogenicity: No data available.

STOT - single exposure: Not classified.

STOT - repeated exposure: Not classified. Aspiration hazard: Not an aspiration hazard.

11.2 Information on other hazards (including endocrine disrupting properties):

Based on available information, the mixture does not contain substances identified as endocrine disruptors at concentrations >= 0.1%.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components: Test results

Methanol (impurity) (67-56-1)

EC50 Algae: 22000 mg/l, 96

hours

EC50 Daphnia magna: > 10000 mg/l, 48 hours

LC50 Fish: 15400 mg/l, 96 hours

12.2 Persistence and degradability

No data is available on the degradability.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

12.6 12.6 Endocrine disrupting properties

Based on available information, the mixture does not contain substances identified as endocrine disruptors at concentrations >= 0.1%.

12.7 Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, or global warming potential) are expected from this mixture.

If dissolved in water, effluent should only be discharged to sewer where connected to an effective wastewater treatment plant and in accordance with local regulations.

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Residual waste

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU Waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal method/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Special precautions

Dispose in accordance with all applicable regulations.

Section 14: TRANSPORT INFORMATION

14.1 UN number or ID number

Not regulated as a hazardous material.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing Group

Not applicable.

14.5 Environmental hazards

No additional data is available.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to IMO instruments

Not applicable.

Section 15: REGULATORY INFORMATION

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

Regulation (EC) No. 1907/2006, REACH Article 59(1). 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.

15.2 Chemical Safety Assessment

No data available.

Section 16: OTHER INFORMATION

16.1 Revision information

Date of this revision: Apr 26, 2026

16.2 Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

16.3 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation for rail International transportation of Dangerous goods.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

IMDG: Code international maritime dangerous goods code.

ICAO-TI: International Civil Aviation Organization The International Civil Aviation Covenant.

IATA: International Air Transport Association.

LC50: Median lethal concentration.

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration.

DNEL: Derived no-effect level.

PNEC: Predicted no-effect concentration.

STOT: Specific target organ toxicity.

IBC: International Bulk Chemical.

TLV: Threshold Limit Value.

PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative.

16.4 Declare to reader

Information in this safety data sheet is based on current knowledge and supplier data considered reliable at the date of revision.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safetyassessment, chapter R.20 (Table of terms and abbreviations).

This safety data sheet complies with Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) No 2020/878, and with Regulation (EC) No. 1272/2008 (CLP), as applicable.

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