

Safety Data Sheet for Chemical Products

ESD Black V1 Resin

Safety data sheet according to Regulation (EU) 2020/878 as amended from time to time

Date / Revised: 27.02.2025

Version: 1.1

Date previous version: 23.10.2024

Version: 1.0

Date / First version: 23.10.2024

Version: 1.0

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Form	Mixture
Product Name	Raise3D ESD Black V1 Resin
UFI Number	DWO4-YAAQ-9TKK-QHMT

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

1.2.1. Relevant identified uses

Use of the substance/mixture Raise3D DLP 3D printers

1.2.2. Uses advised against

Restrictions on use No information available

1.3. Details of the supplier of the safety data sheet

Supplier

Raise 3D Technologies Inc.
13310 Pike Road, Stafford, TX
77477 USA
T +1 888 963 9028
sds@raise3d.com

Importer

Raise3D B.V.
TENORWEG 6 3363 LN SLIEDRECHT
The Netherlands
3013AK
T +31 10 808 0682
enquiry@raise3d.eu

1.4. Emergency number

Emergency number +49 (0) 761-270 19234

SECTION 2. Hazards Identification

2.1. Hazardous substances and mixtures

Classification according to Regulation (EC) No 1272/2008 [CLP]

Skin corrosion/irritation	Category 2
Skin sensitization	Category 1
Serious eye damage/eye irritation	Category 2
Hazardous to the aquatic environment – Chronic Hazard	Category 2

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



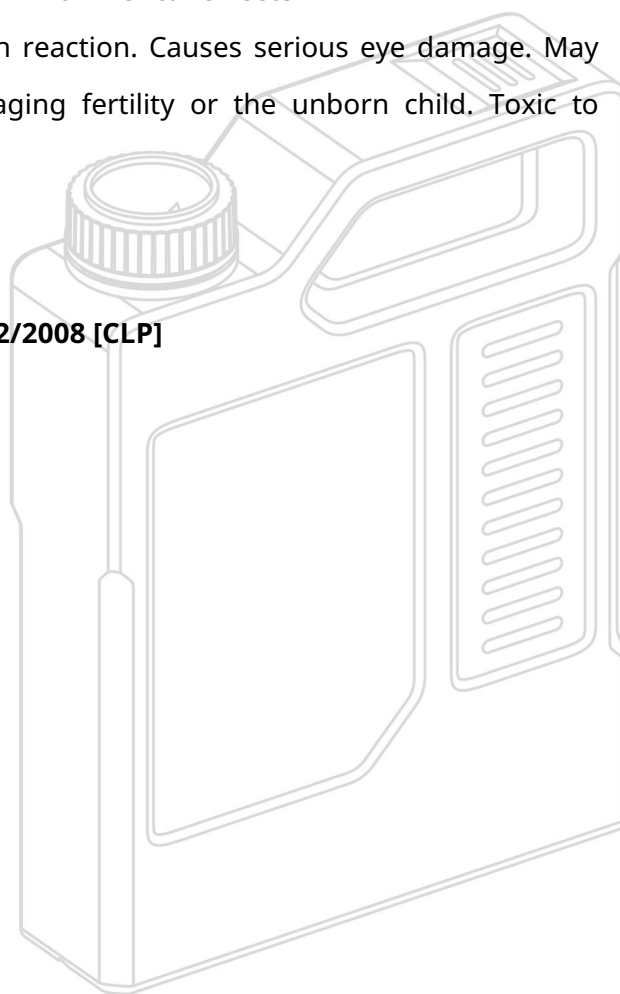
2.3 Signal word:

Warning

2.4 Hazard description:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.



H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

2.5 Precautionary description:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hand thoroughly after handling.

P264 + P265 Wash hand and face thoroughly after handling .Do not touch your eyes.

P272 Contaminated work clothing should not be allowed out of work place.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection or face protection.

P302 + P352 IF ON SKIN: Get medical help

P305 + P354 + P338 If in eyes: Immediately rinse with water for a few minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P317 If skin irritation or rash occurs: Get medical help.

P362 + P364 Take off contaminated clothing and wash if before reuse.

P391 Collect spillage.

P403 + P233 Store in a well-ventilated place. Keep the container airtight.

P405 Store locked up.

P501 Dispose of contents and container to hazardous or special waste collection point.

EUH-statements None.

SECTION 3. Composition / information on ingredients

3.1 Substance

Not applicable.

3.2 Ingredient(s) of the product: Mixture

Name	Product identifier (CAS-No)	%	Classification according to Regulation (EC) No.1272/2008[CLP]
Epoxy acrylic hybrid resins	55818-57-0	$\geq 35 - < 40$	Skin Sens. 1 H317

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EAD-100			Aquatic Chronic 2 H411
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	$\geq 38 - < 45$	Skin Sens. 1 H317 Skin Corr./Irrit. 2 H315
(5-Ethyl-1,3-dioxan-5-yl)methylacrylat	66492-51-1	$\geq 10 - < 15$	Skin Corr./Irrit. 2 H315 Skin Sens. 1 H317 Aquatic Chronic 2 H411
Ethylphenyl(2,4,6-trimethylbenzoyl)phosphinate	84434-11-7	5	Skin Sens. 1 H317 Aquatic Chronic 2 H411

SECTION 4. First aid measures

General advice:1. Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.2.Take off contaminated clothing.

4.1 Following inhalation:

Keep victim calm, move to fresh air, and consult a physician. Corticosteroid spray may be inhaled depending on the condition.

4.2 Following skin contact:

Take off contaminated clothing and shoes immediately. Wash immediately and thoroughly with plenty of water, apply a sterile bandage, and consult a dermatologist.

4.3 Following eye contact:

In case of contact may cause irritation, immediately flush eyes with plenty of water for at least 15 minutes, consult eye doctor. Call a physician immediately if eyes are hurt.

4.4 Following ingestion:

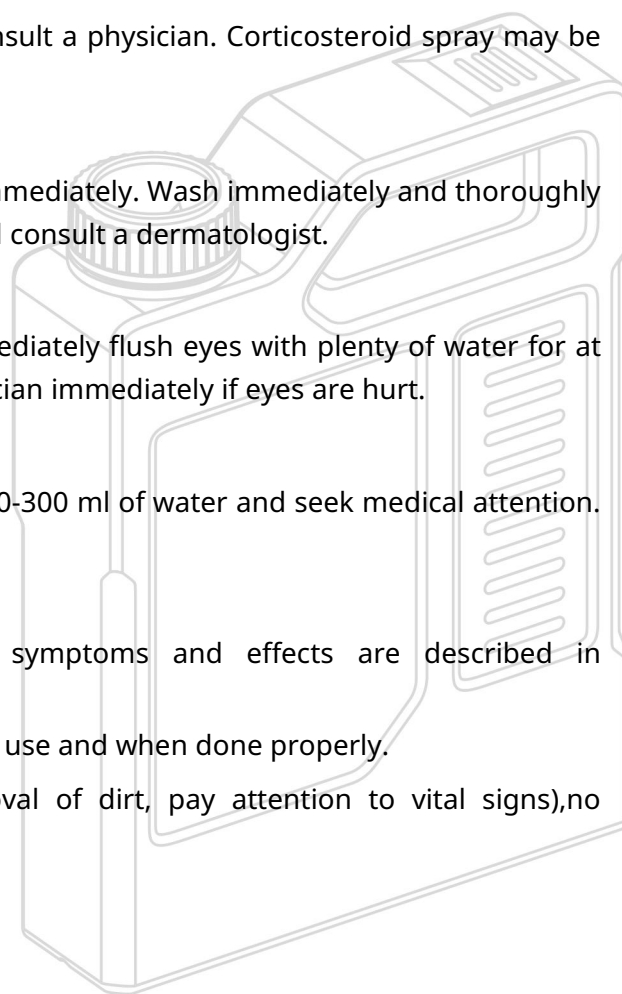
Wash your mouth immediately, then drink 200-300 ml of water and seek medical attention. Call a doctor or poison control immediately.

4.5 Notes for doctors:

Symptoms: The most important known symptoms and effects are described in section2/section11.

Hazards: There is no hazards in the intended use and when done properly.

Treatments: Symptomatic treatment (removal of dirt, pay attention to vital signs),no specific antidotes.



SECTION 5. Firefighting measures

5.1 Hazardous Characteristics:

No fire hazard.

5.2 Extinguishing Media:

Dry powder, chemical foam, carbon dioxide, water mist

5.3 Firefighting procedures:

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

Fight fires at a safe distance and with adequate protection.

Take all precautions to avoid mixing with combustibles.

5.4 Hazardous combustion products:

Carbon monoxide, organic volatiles.

SECTION 6. Accidental release measures

6.1 Personal precautions:

Wear appropriate protective measures (SEE SECTION 8).

6.2 Environmental precautions:

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Cleaning method:

Remove by liquid absorbing material (e.g. kieselguhr, sand) .

Adhered or collected material should be promptly disposed of. Disposal of discarded waste/pollutants refers to SECTION 13, clean up with detergent and avoid solvents.

SECTION 7. Safe handling and storage

7.1 Handling Notes:

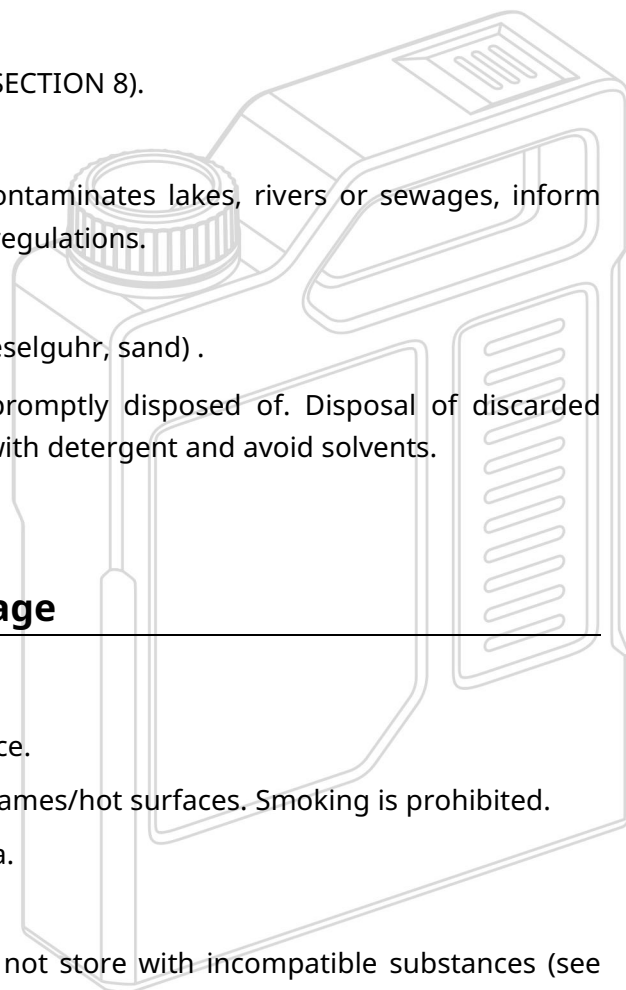
Keep indoor ventilation or local exhaust device.

Keep away from heat sources/sparks/open flames/hot surfaces. Smoking is prohibited.

Use only outdoors or in a well-ventilated area.

7.2 Storage Notes:

Separate from food and animal feed or do not store with incompatible substances (see Section 10.2).



Details on storage conditions: Containers should be tightly sealed and stored in a dry, cool place. Since the product absorbs moisture from the air, keep the container dry. Protect from heat. Protection against light effects. Stabilizers only work in the presence of aerobic conditions. Ensure adequate inhibitor and dissolved oxygen levels.

Prevent temperatures below:0°C

When the storage temperature is below the limit temperature for more than a certain period of time, the product performance can be changed.

Prevent temperatures above:40°C

Storage temperatures above the limit temperatures for a period of time, the product performance can be changed.

SECTION 8. Exposure controls / personal protection

8.1 Occupational Exposure Limit:




No relevant data

8.2 Engineering Control:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Ensure that eyewash stations and safety showers are proximal to the work-station location.

8.3 Personal Protection:

General requirement:	  
Respiratory:	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Eyes:	Wear protective goggle (Conform to EC EN 166 or US-NIOSH).
Hands:	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.

8.4 Sanitary Measure:

Forbid smoking, eating and drinking in working places. Washing hands after handling products.

SECTION 9. Physical and chemical properties

Appearance and Color	Black flowing liquid
Odor	Slight odor
PH value	6.8-7.2
Flammability	Noncombustible
Relative density (g/cm ³)	1.1~1.25g/cm ³ (25°C)
Relative vapor density (g/L) (air = 1)	> 1
Vapor pressure (MPa)	<0.01mmHg
Octanol/water partition coefficient	No Data
Viscosity (mPa·s)	1200-1800 (mPa·s) (25°C)
Flash point (°C,Closed cup)	> 250
Boiling point (°C)	140
Melting/freezing point (°C)	-60
Evaporation rate (kg/s)	No Data
UEL% (V/V)	Not Applicable
LEL% (V/V)	Not Applicable
Auto-ignition temperature (°C)	> 450
Decomposition temperature (°C)	> 250
Solubility	Slightly soluble in water, soluble in organic solvents such as benzene, alcohol, ether

SECTION 10. Stability and reactivity

10.1 Stability:

Stable under recommended storage and handling conditions (See section 7).

10.2 Material for avoiding:

Strong oxide, acid and alkali, Strong reducing agent.

10.3 Contact conditions for avoiding:

Humidity, high temperature, sunlight.

10.4 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. Toxicological information

11.1 Acute toxicity:

Although no data of known appropriate health effects on humans or animals exist, this substance is expected to be mildly injurious in ingestion.

11.2 Skin corrosion/irritation:

Causes skin irritation.

11.3 Serious eye damage/irritation:

Exposure to products can cause severe eye irritation, with symptoms including severe pain, burning, tearing or swelling.

11.4 Respiratory or skin sensitization:

May cause skin allergic reaction.

11.5 Germ cell mutagenicity:

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

11.6 Carcinogenicity:

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

11.7 Reproductive toxicity:

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

11.8 STOT-single exposure:

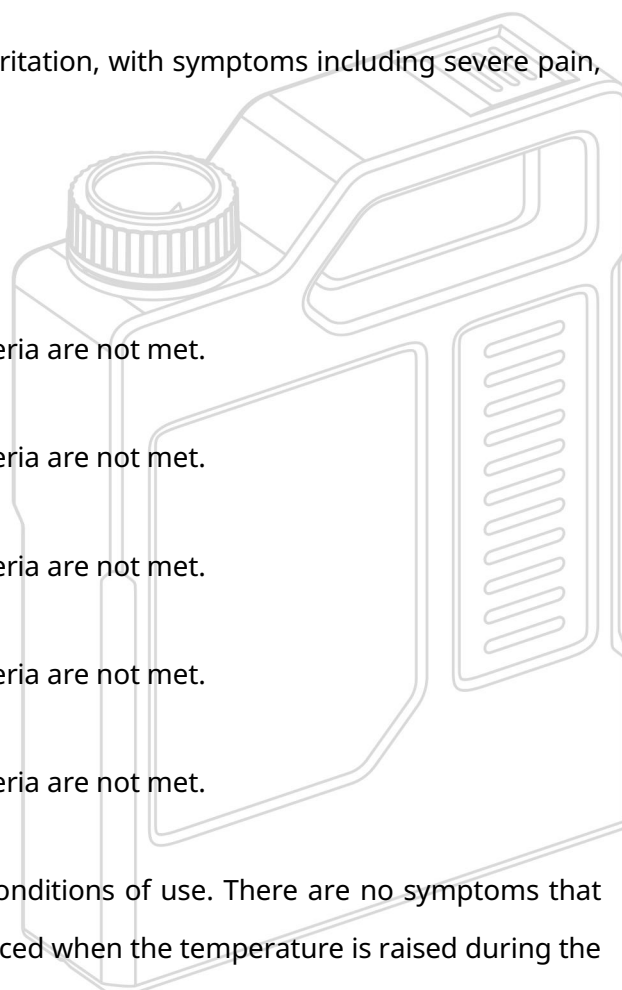
Based on available data, the classification criteria are not met.

11.9 STOT-repeated exposure:

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

11.10 Aspiration hazard:

Low volatility of the product under normal conditions of use. There are no symptoms that are harmful to health. Gas or vapor may be produced when the temperature is raised during the process. Causes irritation to the respiratory tract. Symptoms of respiratory irritation may include



coughing, mucus secretion, and shortness of breath.

SECTION 12. Ecological information

12.1 Toxicity:

Aquatic toxicity evaluation: Harmful to aquatic life. Toxicity to aquatic life and has long lasting effects. Product untested. This statement is based on the properties of individual components.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil

No data available.

12.5 Other Dangers:

PBT and vPvB evaluation results: Not applicable

SECTION 13. Disposal considerations

13.1 Handling method for waste:

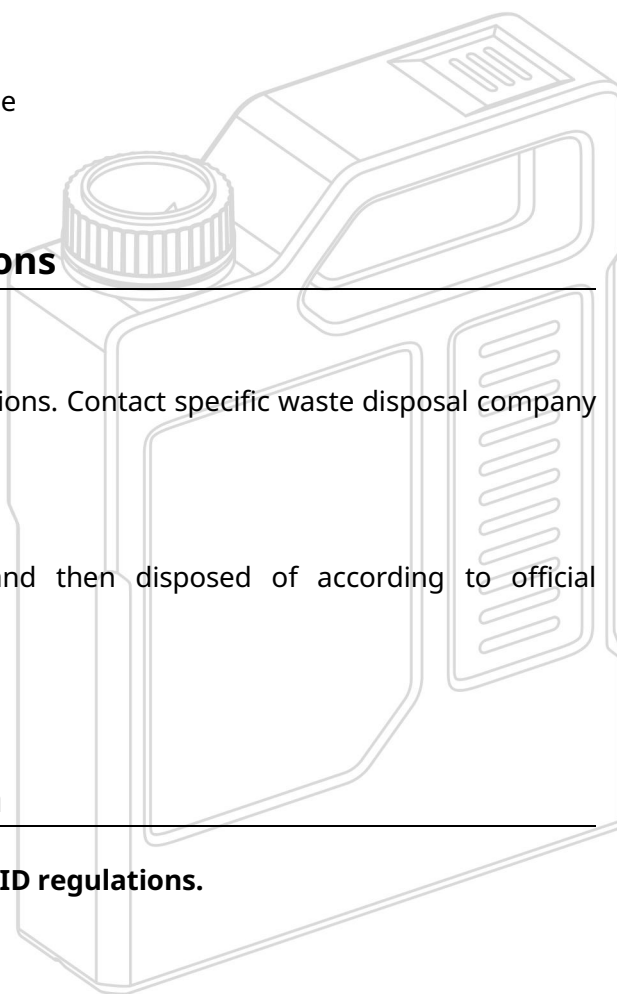
Handling waste according to the local regulations. Contact specific waste disposal company or companies recommended by local laws.

13.2 Handling method for uncleaned packaging

The packaging bottle must be emptied and then disposed of according to official regulations.

SECTION 14. Transport information


In accordance with ADR / IMDG / IATA / ADN / RID regulations.



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Packaging Label	
UN NO	UN 3082
Technical name	Environmentally hazardous substance, liquid, n. o. s.
Transport hazard class	9
Subsidiary hazard class	None
Packing group	III
Environmental hazards	Dangerous for the environment: Yes

More information:

When the product is packaged in a capacity below 5L and satisfy Special Regulation 375 in ADR,RID,ADN,2.10.2.7 in IMDG,A197 in IATA, Special Regulation 99(2)in TDG, Section 171.4(c)(2)in 49 CFR and the requirements of Special Provision 375 in Appendix B of Chinese “Regulation concerning road transportation of dangerous goods-Part3:Index of dangerous goods name and transportation requirement”(JT/T617.3),it can be transported as ordinary goods, and it is not subject to other requirements related to the transport of dangerous goods.

SECTION 15. Regulatory information

This product is subject to the provisions of “Hazardous Chemical Safety Management Regulations”, which refer to Section 14 of this SDS for classification of dangerous goods.

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

15.1.1 EU-Regulations

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List.

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals).

POP Regulation (Persistent Organic Pollutants)

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Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants).

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer).

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors).

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances).

15.1.2 Other Regulations:

If regulatory information applicable to this product is not provided elsewhere in this safety technical note, it will be described in this section.

15.1.2.1 Registration Status:

IECSC, CN

All substances are listed in IECSC.

This safety technical specification is made according to "General rule for classification and hazard communication of chemicals"(if the product is applied to medicine),This product is subject to the provisions of "Drug Administration Law of the People's Republic of China"(if the product is applied to medicine),"the regulations on the Administration of Feed and Feed Additives"(if the product is applied to feed)and "Food Safety Law of the People's Republic of China"(if the product is applied to food).

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16. Other information

Any other use should be discussed with the manufacturer.

The information in this MSDS is obtained from sources we believe to be reliable. However,

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we have no express or implied warranty on the data provided. The handling, storage, use or disposal of this product is beyond our control and may exceed our knowledge. Under no circumstances will we be liable for any loss, damage and related costs arising from improper handling, storage, use or disposal of this chemical. This MSDS is based on this product and can only be used for this product.

