

Raise3D PA NEXT GB Black V1 Powder Safety Data Sheet (SDS)

According to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878, Regulation (EC) 1272/2008

amended by Regulation (EU) 2024/2865

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

1.1. Product identifier

Product form: Mixture

Product name: Raise3D PA NEXT GB Black V1 Powder

Additional identification: Nanoform is NOT covered by this SDS.

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: For Raise3D SLS 3D Printers.

1.2.2. Uses advised against

Restrictions on use: Not available

1.3. Details of the supplier of the safety data sheet

Supplier

Raise3D Technologies Inc.

13310 Pike Road, Stafford, TX 77477

T +1 888 963 9028

hailey.shao@raise3d.com

Importer

Raise3D B.V.

Tenorweg 6, 3363LN, Sliedrecht

T +31 (0)6 23872606

enquiry@raise3d.eu

1.4. Emergency telephone number

+49 (0) 761-270 19234

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS (8th revised edition).



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AMERICA · ASIA · EUROPE

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation GHS (8th revised edition).

No labelling applicable

2.3. Other hazards

None.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	CAS-No.	Range % by Wt.
PA1012	1239600-88-4	>60
Glass beads	65997-17-3	>35
Carbon black	1333-86-4	< 3
Silicon dioxide	10279-57-9	<0.5
Titanium dioxide	1317-70-0	<0.5
Tris(2,4-ditert-butylpheny 1) phosphite	31570-04-4	<1.0



SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.

Symptoms/effects after skin contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact: None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion: None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use any means suitable for extinguishing surrounding fire.



Suitable extinguishing media: water spray, alcohol-resistant foam, dry powder, carbon dioxide, etc.

5.2. Special hazards arising from the substance or mixture

Fire hazard: No fire hazard.

Explosion hazard: No direct explosion hazard.

Hazardous decomposition products in case of fire: Carbon oxides, nitrogen oxides(NOx), phosphorus oxides and other toxic or irritating fumes.

5.3. Advice for firefighters

Firefighting instructions: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment: Wear recommended personal protective equipment.

Emergency procedures: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid dust formation. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures: Evacuate unnecessary personnel.



6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed.

Avoid inhalation of dust. Wash skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Stored in a cool, dry, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values



Carbon black (1333-86-4)	
Belgium - Occupational Exposure Limits	
Local name	Carbone (noir de) # Koolzwart
OEL TWA	3 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Croatia - Occupational Exposure Limits	
Local name	Ugljik-crni
GVI (OEL TWA)	3,5 mg/m ³
KGVI (OEL STEL)	7 mg/m ³
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023)
Czech Republic - Occupational Exposure Limits	
Local name	Amorfni uhlík (Carbon Black)



Carbon black (1333-86-4)	
PEL (OEL TWA)	10 mg/m ³ (pro celkovou koncentraci)
Remark	Prachy s převážně nespecifickým účinkem.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Carbon black
OEL TWA	3,5 mg/m ³
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende og omfattet af bekendtgørelse om foranstaltninger til forebyggelse af risici ved arbejde med stoffer og materialer, der kan være kræftfremkaldende, mutagene eller reproduktionstoksiske)
Regulatory reference	BEK nr 1619 af 19/12/2024



Carbon black (1333-86-4)	
Finland - Occupational Exposure Limits	
Local name	Nokimusta
HTP (OEL TWA)	3,5 mg/m ³
HTP (OEL STEL)	7 mg/m ³
Regulatory reference	HTP-ARVOT 2025 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Noir de carbone
VME (OEL TWA)	3,5 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 6443, 2022; Outil65)



Carbon black (1333-86-4)	
Greece - Occupational Exposure Limits	
Local name	Αιθάλη
OEL TWA	3,5 mg/m ³
OEL STEL	7 mg/m ³
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	Ipari korom [„Carbon Black“]
AK (OEL TWA)	3 mg/m ³ belélegezhető koncentráció
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről



Carbon black (1333-86-4)	
Ireland - Occupational Exposure Limits	
Local name	Carbon black
OEL TWA	3 mg/m ³ I (Inhalable Fraction)
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
Poland - Occupational Exposure Limits	
Local name	Sadza techniczna
NDS (OEL TWA)	4 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikać przez nos i usta, która stwarza zagrożenie dla zdrowia po zdeponowaniu w drogach oddechowych.
Regulatory reference	Dz. U. 2024 poz. 1017 wraz z późn. zm.



Carbon black (1333-86-4)	
Portugal - Occupational Exposure Limits	
Local name	Carbono, preto (Negro de fumo)
OEL TWA	3 mg/m ³ I (Fração inalável)
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratório com relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Spain - Occupational Exposure Limits	
Local name	Negro de humo
VLA-ED (OEL TWA)	3,5 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2025. INSHT
United Kingdom - Occupational Exposure Limits	
Local name	Carbon black



Carbon black (1333-86-4)	
WEL TWA (OEL TWA)	3,5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Kolefni
OEL TWA	3,5 mg/m ³
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Carbon Black (lampesot)
Grenseverdi (OEL TWA)	3,5 mg/m ³
Regulatory reference	FOR-2024-04-05-581

8.1.2. Recommended monitoring procedures



No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available



8.2.3. Environmental exposure controls

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
Colour	Black.
Appearance	Powder.
Odour	odourless.
Odour threshold	Not available
Melting point	180-188 °C
Freezing point	Not applicable
Boiling point	Not available
Flammability	Non flammable.
Explosive limits	Not applicable
Lower explosion limit	Not applicable.
Upper explosion limit	Not applicable.
Flash point	Not applicable
Auto-ignition temperature	> 350 °C
Decomposition temperature	> 300 °C
pH	Not available



pH solution	Not available
Viscosity, kinematic	Not applicable
Solubility	Immiscible with water.
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Bulk density	0.48-0.54 g/cm ³ .
Relative vapour density at 20°C	Not applicable
Particle size	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.



10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

Carbon black (1333-86-4)

LD50 oral rat: > 8000 mg/kg

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

Titanium dioxide (CAS No. 1317-70-0)

LD50 • Oral - Rat - >5000 mg/kg



LC50 - Inhalation - Rat - 4h - >6.82 mg/1

Tris(2,4-ditert-butylphenyl) phosphite (CAS No. 31570-04-4)

LD50 - Oral - Rat - >6000 mg/kg

LD50 - Dermal • Rat - >2000 mg/kg

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties: The substance/mixture has no endocrine disrupting properties.

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

Carbon black (1333-86-4)

LC50 96h - Fish [1]: > 1000 mg/l

EC50 72h - Algae [1]: > 10000 mg/l

NOEC chronic algae: ≥ 10000 mg/l

Tris(2,4-ditert-butylphenyl) phosphite (CAS No. 31570-04-4):

Toxicity to fishes LC0 - Danio rerio - >100 mg/l - 96 h

Toxicity to algae and other aquatic plants EC50 - Desmodesmus subspicatus - >75 mg/l - 72 h

Toxicity to Crustacea EC50 - Daphnia magna - >510 mg/l - 24 h

12.2. Persistence and degradability



No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Raise3D PA NEXT GB Black V1 Powder

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties: The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation: Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

Product/Packaging disposal recommendations: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.

Additional information: Do not re-use empty containers.

SECTION 14: Transport information



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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport: Not regulated

Transport by sea: Not regulated

Air transport: Not regulated

Inland waterway transport: Not regulated

Rail transport: Not regulated

14.7. Maritime 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 or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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)

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 2024/590 on substances that deplete the ozone layer)

Explosives Precursors Regulation (EU 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 (EC 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. National regulations



Germany

Employment restrictions: Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK): WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Override matching entry (12. BImSchV): Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

ABM category: A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen: None of the components are listed

SZW-lijst van mutagene stoffen: None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding: None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid: None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling: None of the components are listed

Denmark

Danish National Regulations: The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK): NG - Non-hazardous

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information



Abbreviations and acronyms:	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment



Abbreviations and acronyms:	
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose



Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic



Abbreviations and acronyms:	
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Disclaimer:

The information in this Safety Data Sheet (SDS) applies only to the specified product. Unless otherwise specified, it does not apply to mixtures of this product with other substances. This Safety Data Sheet (SDS) is based on currently available information and the author assumes no responsibility for its continued currency. This Safety Data Sheet (SDS) is intended solely for properly trained personnel operating this product. Users of this Safety Data Sheet (SDS) must independently determine its applicability under specific conditions of use. The author of the SDS assumes no responsibility for any injuries resulting from the use of this Safety Data Sheet (SDS) under specific circumstances. Each user should carefully read the contents of this Safety Data Sheet (SDS) before operating the product. For further information to ensure a proper evaluation, please contact the product supplier. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

