

SDS for biochemistry

Version number: GHS 4.0
Replaces version of: 2025-01-15 (GHS 3)

Revision: 2026-02-11

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

1.1 Product identifier

Identification of the substance

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CAS number

151-21-3

Alternative name(s)

dodecyl sulphate sodium salt

Article number

3250

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

Relevant identified uses

General use

1.3 Details of the supplier of the safety data sheet

NeoFroxx GmbH
Marie-Curie-Str. 3
D-64683 Einhausen
Germany

Telephone: +49 (6251) 989 24 - 0
e-mail: info@neofroxx.com
Website: neofroxx.com

e-mail (competent person)

info@neofroxx.com (neoFroxx GmbH)

1.4 Emergency telephone number

Poison centre			
Country	Name	Postal code/city	Telephone
United Kingdom	National Poisons Information Service		111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.7	flammable solid	2	Flam. Sol. 2	H228
3.10	acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

- Signal word danger

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- Pictograms

GHS02, GHS05, GHS07



- Hazard statements

H228 Flammable solid.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P501 Dispose of contents/container to industrial combustion plant.

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance SDS for biochemistry

Identifiers

CAS No 151-21-3

EC No 205-788-1

Specific Conc. Limits	M-Factors	ATE	Exposure route
Eye Dam. 1; H318: $C \geq 20 \%$ Eye Irrit. 2; H319: $10 \% \leq C < 20 \%$	-	1,200 mg/kg	oral

Molecular formula C₁₂H₂₅NaO₄S

Molar mass 288.4 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

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If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂), Sulphur oxides (SO_x)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materi-

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als: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.
- Specific notes/details
Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres
Removal of dust deposits.
- Flammability hazards
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Ventilation requirements
Use local and general ventilation.
- Specific designs for storage rooms or vessels
- Storage temperature
Recommended storage temperature: 25 °C
Maximum storage temperature: 25 °C
- Packaging compatibilities
Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
GB	dust		WEL		10					i	EH40/2005
GB	dust		WEL		4					r	EH40/2005

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
i	inhalable fraction
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours

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Notation

time-weighted average (unless otherwise specified)

Human health values

Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	285 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	4,060 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Environmental values

Relevant PNECs and other threshold levels				
Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	0.176 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	0.018 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	1.35 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	6.97 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	0.697 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	1.29 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

min. 0,11 mm

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid (powder)
Colour	white
Odour	odourless
Melting point/freezing point	205 °C
Boiling point or initial boiling point and boiling range	216 °C at 1,022 mbar
Flammability	flammable solid in accordance with GHS criteria
Lower and upper explosion limit	not relevant (solid)
Flash point	170 °C
Auto-ignition temperature	310.5 °C (ECHA Chem) (relative self-ignition temperature for solids)
Decomposition temperature	>216 °C at 1,022 mbar
pH (value)	9.1
Kinematic viscosity	not relevant

Solubility(ies)

Water solubility	>130 g/l at 20 °C
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Partition coefficient

Partition coefficient n-octanol/water (log value)	0.83 (22 °C) (ECHA Chem)
Soil organic carbon/water (log KOC)	2.285 (ECHA Chem)

Vapour pressure	<0 hPa
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Density and/or relative density

Density	>1.11 g/ml
Relative vapour density	not relevant (solid)

Particle characteristics

Particle characteristics	no data available
Granulometry	< 1,042 µm = 50 %

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Particle size	1,042 µm
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9.2 Other information

Information with regard to physical hazard classes	there is no additional information
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Other safety characteristics

Surface tension	25.2 mN/m (23 °C, 1 g/l) (ECHA Chem)
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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful if swallowed.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

- Acute toxicity estimate (ATE)

Oral 1,200 mg/kg

Acute toxicity			
Exposure route	Endpoint	Value	Species
oral	LD50	1,200 mg/kg	rat
oral	LD50	977 mg/kg	rat
oral	LD50	1,427 mg/kg	rat

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Acute toxicity			
Exposure route	Endpoint	Value	Species
oral	LD50	>5,000 mg/kg	rat
oral	LD50	>1,500 mg/kg	rat
dermal	LD50	>2,000 mg/kg	rabbit
dermal	LD50	>500 mg/kg	rabbit
dermal	LD50	>2,000 mg/kg	rat
dermal	LD50	>2,000 mg/kg	rabbit

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute)			
Endpoint	Value	Species	Exposure time
ErC50	>120 mg/l	algae	72 h
LC50	19.5 mg/l	fish	96 h
LC50	11.2 mg/l	fish	96 h
LC50	4.62 mg/l	fish	96 h
LC50	7.97 mg/l	fish	96 h
LC50	8.1 mg/l	fish	96 h
EC50	12.2 mg/l	aquatic invertebrates	48 h

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Aquatic toxicity (acute)			
Endpoint	Value	Species	Exposure time
EC50	2.05 mg/l	aquatic invertebrates	48 h
EC50	11.1 mg/l	aquatic invertebrates	48 h
EC50	1.2 mg/l	aquatic invertebrates	48 h
EC50	9.8 mg/l	aquatic invertebrates	48 h
LC10	4.34 mg/l	aquatic invertebrates	96 h

Aquatic toxicity (chronic)			
Endpoint	Value	Species	Exposure time
EC50	6.3 mg/l	fathead minnow (Pimephales promelas)	28 d
EC50	3.2 mg/l	aquatic invertebrates	60 min
EC50	1.2 mg/l	aquatic invertebrates	2 d
LC50	1.48 mg/l	aquatic invertebrates	28 h
LC50	1.55 mg/l	aquatic invertebrates	38 h
LC50	1.59 mg/l	aquatic invertebrates	38 h
EC0	409 mg/l	soil microorganisms	16 h

12.2 Persistence and degradability

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	97 %	28 d
oxygen depletion	94 %	28 d
carbon dioxide generation	95 %	28 d
carbon dioxide generation	81.5 %	10 d

12.3 Bioaccumulative potential

Data are not available.

n-octanol/water (log KOW)	0.83 (22 °C) (ECHA Chem)
BCF	4 (ECHA Chem)

12.4 Mobility in soil

Henry's law constant	0.019 Pa m ³ /mol at 25 °C
The Organic Carbon normalised adsorption coefficient	2.285 (ECHA Chem)

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

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12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packageings

It is a dangerous waste; only packageings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID	UN 1325
IMDG-Code	UN 1325
ICAO-TI	UN 1325

14.2 UN proper shipping name

ADR/RID	FLAMMABLE SOLID, ORGANIC, N.O.S.
IMDG-Code	FLAMMABLE SOLID, ORGANIC, N.O.S.
ICAO-TI	Flammable solid, organic, n.o.s.
Technical name	dodecyl sulphate sodium salt

14.3 Transport hazard class(es)

ADR/RID	4.1
IMDG-Code	4.1
ICAO-TI	4.1

14.4 Packing group

ADR/RID	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

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Classification code	F1
Danger label(s)	4.1



Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	3
Tunnel restriction code (TRC)	E
Hazard identification No	40
Emergency Action Code	1Z

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code	F1
Danger label(s)	4.1



Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	3
Hazard identification No	40

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	4.1



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-G
Stowage category	B

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	4.1
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Special provisions (SP)	A3
Excepted quantities (EQ)	E1

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Limited quantities (LQ)

10 kg

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Deco-Paint Directive

VOC content	100 %
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Industrial Emissions Directive (IED)

VOC content	0 %
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Water Framework Directive (WFD)

List of pollutants (WFD)			
Name of substance	CAS No	Listed in	Remarks
SDS for biochemistry		a)	

Legend

a) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

not listed

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
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Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK)

4.1 B (flammable or desensitizing explosive solids)

National inventories

Country	Inventory	Status
EU	REACH Reg.	substance is listed

Legend

REACH Reg. REACH registered substances

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

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SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.2		- Hazard statements: change in the listing (table)	yes
2.2		- Precautionary statements: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.	yes
3.1		EC No: change in the listing (table)	yes
3.1	Molecular formula: $C_{12}H_{25}NaO_4S$	Molecular formula: $C_{12}H_{25}NaO_4S$	yes
4.1	Following skin contact: Wash with plenty of soap and water.	Following skin contact: Rinse skin with water/shower.	yes
5.2	Special hazards arising from the substance or mixture	Special hazards arising from the substance or mixture: Deposited combustible dust has considerable explosion potential.	yes
7.1	- Measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation. Use only in well-ventilated areas. Ground/bond container and receiving equipment.	- Measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.	yes
7.2	- Ventilation requirements: Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.	- Ventilation requirements: Use local and general ventilation.	yes
7.2		- Specific designs for storage rooms or vessels	yes
7.2		Storage temperature: Recommended storage temperature: 25 °C Maximum storage temperature: 25 °C	yes
8.1	Control parameters: Occupational exposure limit values (Workplace Exposure Limits) this information is not available	Control parameters	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.2	Respiratory protection: P2 (filters at least 94 % of airborne particles, colour code: White).	Respiratory protection: Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).	yes
9.1	Physical state: solid	Physical state: solid (powder)	yes
9.1	Auto-ignition temperature: 310.5 °C (relative self-ignition temperature for solids)	Auto-ignition temperature: 310.5 °C (ECHA Chem) (relative self-ignition temperature for solids)	yes
9.1	pH (value): 9.1 (in aqueous solution: 1 wt%)	pH (value): 9,1	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
9.1	Partition coefficient n-octanol/water (log value): ≤-2.03 (20 °C)	Partition coefficient n-octanol/water (log value): 0.83 (22 °C) (ECHA Chem)	yes
9.1	Soil organic carbon/water (log KOC): 2.5 – 2.65	Soil organic carbon/water (log KOC): 2.285 (ECHA Chem)	yes
9.1	Vapour pressure: ≤0.18 Pa at 20 °C	Vapour pressure: <0 hPa	yes
9.1	Density: 0.63 g/ml	Density: >1.11 g/ml	yes
9.1		Particle characteristics: no data available	yes
9.1		Granulometry: < 1,042 µm = 50 %	yes
9.2	Surface tension: 25.2 mN/m (23 °C)	Surface tension: 25.2 mN/m (23 °C, 1 g/l) (ECHA Chem)	yes
11.1	Acute toxicity: Harmful if swallowed. Harmful if inhaled.GHS of the United Nations, annex 4: May be harmful in contact with skin.	Acute toxicity: Harmful if swallowed.GHS of the United Nations, annex 4: May be harmful in contact with skin.	yes
11.1		- Acute toxicity estimate (ATE): change in the listing (table)	yes
11.1		Acute toxicity: change in the listing (table)	yes
11.1	Specific target organ toxicity - single exposure: May cause respiratory irritation.	Specific target organ toxicity - single exposure: Shall not be classified as a specific target organ toxicant (single exposure).	yes
12.1		Aquatic toxicity (acute): change in the listing (table)	yes
12.1		Aquatic toxicity (chronic): change in the listing (table)	yes
12.2		Process of degradability: change in the listing (table)	yes
12.3	n-octanol/water (log KOW): ≤-2.03 (20 °C)	n-octanol/water (log KOW): 0.83 (22 °C) (ECHA Chem)	yes
12.3		BCF: 4 (ECHA Chem)	yes
12.4	The Organic Carbon normalised adsorption coefficient: 2.5 – 2.65	The Organic Carbon normalised adsorption coefficient: 2.285 (ECHA Chem)	yes
12.6	Endocrine disrupting properties: Information on this property is not available.	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
15.1		Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)	yes
15.1		Storage class (LGK): 4.1 B (flammable or desensitizing explosive solids)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16		List of relevant phrases (code and full text as stated in section 2 and 3): change in the listing (table)	yes

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Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit

SDS for biochemistry

Version number: GHS 4.0
Replaces version of: 2025-01-15 (GHS 3)

Revision: 2026-02-11

Abbr.	Descriptions of used abbreviations
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. The information is intended to give you guidelines for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials or is subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise.