

Safety Data Sheet

#27875244 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
N-Octyl-N,N-dimethyl-3-ammonio-1-propanesulfonate (SB-8)	15178-76-4	C13H29NO3S	10	11 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name	N-Octyl-N,N-dimethyl-3-ammonio-1-propanesulfonate (SB-8)
CAS number	15178-76-4
EC / EINECS number	Not applicable
Chemical formula	C13H29NO3S
Molecular weight	279.44
SMILES	<chem>CCCCCCC[N+](C)(C)CCCS(=O)(=O)[O-]</chem>

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

For research and development. Laboratory chemicals. Manufacture of substances.
Not suitable for human or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Skin Irrit. 2; H315
Skin Sens. 1; H317
Eye Irrit. 2; H319
STOT SE 3; H335

2.2 Label elements



WARNING

CODE	HAZARD STATEMENT
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H315	Causes skin irritation
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H317	May cause an allergic skin reaction
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H319	Causes serious eye irritation
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H335	May cause respiratory irritation
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CODE	PRECAUTIONARY STATEMENT
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P261	Avoid breathing dust/fume/gas/mist/vapours/spray
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P264	Wash thoroughly after handling
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P271	Use only outdoors or in a well-ventilated area
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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P302+352	IF ON SKIN: Wash with soap and water
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P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
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P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
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P312	Call a POISON CENTER or doctor/physician if you feel unwell
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2.3 Other hazards

Does not meet PBT or vPvB criteria under REACH Annex XIII. This product does not contain any known or suspected Endocrine disruptors.

SECTION 3

Composition / information on ingredients**3.1 Substances**

Name	N-Octyl-N,N-dimethyl-3-ammonio-1- propanesulfonate (SB-8)
CAS number	15178-76-4
Concentration / purity	<= 100%
Classification according to Regulation (EC) No 1272/2008	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 STOT SE 3; H335
Hazard statements	H315, H317, H319, H335
Acute toxicity estimate (ATE)	<i>No data available</i>
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures**4.1 Description of first aid measures**

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic skin reaction. Symptoms may include rash, itching, swelling, trouble breathing, tingling of hands/feet, dizziness, chest pain, muscle pain, or flushing.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam
Unsuitable extinguishing media	No specific firefighting procedure given

5.2 Special hazards arising from the substance or mixture

Thermal decomposition releases irritating gases and vapors. Hazardous combustion products:

Combustible

Carbon monoxide (CO)

Nitrogen oxides (NO_x)

Sulphur oxides (SO_x)

Carbon dioxide (CO₂).

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective gear.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

6.2 Environmental precautions

Should not be released into the environment.

6.3 Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with eyes, skin, clothing, ingestion, or inhalation. Avoid dust formation. Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs.

Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	Ambient
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Conditions for safe storage (incompatibilities)	Keep containers tightly closed in a dry, cool, and well-ventilated place.
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7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection**8.1 Control parameters**

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

Eye / face protection Chemical splash goggles
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Gloves: Nitrile Rubber, 0.11mm (480 mins).

Respiratory protection Half-mask with filter
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

Other protection *No data available*

Environmental exposure controls *No data available*

SECTION 9

Physical & chemical properties**9.1 Information on basic physical and chemical properties**

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour White
DERIVED FROM: LITERATURE

Odour Not known
DERIVED FROM: LITERATURE

Melting / freezing point 217 °C (422.6 °F)
DERIVED FROM: LITERATURE

Boiling point No data available.
DERIVED FROM: LITERATURE

Flammability *No data available*

Lower and upper explosion limit *No data available*

Flash point *Not applicable*

Auto-ignition temperature *No data available*

Decomposition temperature *No data available*

pH No data available.
DERIVED FROM: LITERATURE

Acidity	Neutral DERIVED FROM: LITERATURE
Kinematic viscosity	No data available
Solubility	100 g/L (water) DERIVED FROM: LITERATURE
Partition coefficient n-octanol/water (log value)	No data available
Vapour pressure	No data available
Density (g/mL)	1 g/mL DERIVED FROM: LITERATURE
Relative vapour density	No data available
Particle characteristics	No data available

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Violent reactions possible with: Oxidising agents.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Excess heat, dust formation, incompatible products

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides, carbon dioxide (CO₂). See section 5

SECTION 11

Toxicological information

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

Acute toxicity (LD50 / LC50) Not applicable

Skin corrosion / irritation Causes skin irritation

Eye corrosion / irritation	Causes serious eye irritation
Respiratory / skin sensitisation	Category 1 (skin sensitisation). May cause an allergic skin reaction
Carcinogenicity	No known carcinogenic chemicals
Mutagenicity	<i>No data available</i>
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	May cause respiratory irritation.
Aspiration hazard	Not applicable (solid)

11.2 Information on other hazards

No known or suspected endocrine disruptors

SECTION 12

Ecological information

12.1 Toxicity

No specific data provided

12.2 Persistence and degradability

Persistence unlikely; soluble in water

12.3 Bioaccumulative potential

Bioaccumulation unlikely

12.4 Mobility in soil

Highly mobile in soils and water systems due to water solubility

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

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

Not applicable

14.6 Special precautions for user

Special precautions for user Not applicable

Transport category Not applicable

Tunnel code Not applicable

Packing instruction (ADR) Not applicable

Packing instruction (IMDG) Not applicable

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences) No data available

REACH code Y110

ECHA notification Not applicable

15.2 Chemical safety assessment

No

SECTION 16

Other information

Revision notes / other information Not applicable

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.