

Suxamethonium chloride

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
 Issue date: 03/04/2023 Revision date: 17/08/2023 Supersedes version of: 03/04/2023 Version: 2.0

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

1.1. Product identifier

| | |
|----------------|--|
| Product form | : Substance |
| Substance name | : Suxamethonium chloride |
| Chemical name | : Succinylcholine chloride dihydrate |
| Product code | : 201600864 |
| Synonyms | : 2,2'-[butanediolylbis(oxy)]bis(N,N,N-trimethylethanaminium) dichloride |

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

1.2.1. Relevant identified uses

| | |
|------------------------------|--|
| Main use category | : The product is intended for research, analysis and scientific education. |
| Use of the substance/mixture | : For professional use only |
| Function or use category | : Laboratory chemicals |

1.2.2. Uses advised against

| | |
|---------------------|--|
| Restrictions on use | : Do not use : Ingestion, Inhalation, Dermal |
|---------------------|--|

1.3. Details of the supplier of the safety data sheet

European Directorate for the Quality of Medicines & Healthcare
 EDQM, Council of Europe 7, Allée Kastner, CS30026
 F- 67081 Strasbourg
 France
 T +33(0)388412035 - F +33(0)388412771
sds@edqm.eu - www.edqm.eu

1.4. Emergency telephone number

| | |
|------------------|-------------------|
| Emergency number | : +33(0)390215608 |
|------------------|-------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| | |
|--|------|
| Acute toxicity (oral), Category 3 | H301 |
| Full text of H- and EUH-statements: see section 16 | |

Adverse physicochemical, human health and environmental effects

Expert judgement and weight of evidence determination.

2.2. Label elements

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

| | |
|--------------------------------|---|
| Hazard pictograms (CLP) | : <div style="text-align: center;">  GHS06 </div> |
| Signal word (CLP) | : Danger |
| Hazard statements (CLP) | : H301 - Toxic if swallowed. |
| Precautionary statements (CLP) | : P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P405 - Store locked up. |

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

Hazard pictograms (CLP)



GHS06

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------------|--------------------|-------|---|
| Succinylcholine chloride dihydrate | - | ≤ 100 | Acute Tox. 3 (Oral), H301 (ATE=175 mg/kg bodyweight) |

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: Move to fresh air. Allow affected person to breathe fresh air.

First-aid measures after skin contact

: Wipe off as much as possible (using a clean, soft, absorbent material). Wash with plenty of water and detergent.

First-aid measures after eye contact

: Rinse with water while holding the eyes wide open.

First-aid measures after ingestion

: Rinse mouth. Immediately call a POISON CENTER/doctor. Specific medical surveillance.

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

Symptoms/effects after inhalation

: Insufficient data available.

Symptoms/effects after skin contact

: Insufficient data available.

Symptoms/effects after eye contact

: Insufficient data available.

Symptoms/effects after ingestion

: Symptoms may include dizziness, headache, nausea and loss of coordination.

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

Get medical advice/attention. If possible show this sheet, if not available show packaging or label. Active substance. Pharmaceutical.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Extinguishing blanket.

5.2. Special hazards arising from the substance or mixture

Fire hazard : See Heading 2.2.

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5.3. Advice for firefighters

Firefighting instructions : Use extinguishing media appropriate for surrounding fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid any direct contact with the product. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ensure waste is collected and contained. Clean thoroughly.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

Precautions for safe handling : Material should be handled with caution. Avoid any direct contact with the product.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store locked up.

7.3. Specific end use(s)

See Heading 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Keep in a well-ventilated room. Use only in a exhaust booth with integrated air filter. High efficiency particulate air filter (HEPA filter).

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. DIN EN 166

8.2.2.2. Skin protection

Skin and body protection:

Use chemically protective clothing. DIN EN 13034

Hand protection:

Chemically resistant protective gloves. ISO 374-1

8.2.2.3. Respiratory protection

Respiratory protection:

Dust production: dust mask with filter type P3. DIN EN 140 & 149. Liquid product : Aerosol mask. Wear breathing apparatus if exposed to vapours/dusts/aerosols

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Solid |
| Colour | : Not available |
| Appearance | : Powder. |
| Odour | : Not applicable. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : Not available |
| Flammability | : Not available |
| Explosive limits | : Not applicable |
| Lower explosion limit | : Not applicable |
| Upper explosion limit | : Not applicable |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : Not available |
| pH | : $\geq 4 - \leq 5$ (Aqueous solution) |
| pH solution | : Not available |
| Viscosity, kinematic | : Not applicable |
| Solubility | : Water: 100 – 1000 g/l |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not applicable |
| Particle size | : Not available |

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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

Stable under normal conditions.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

None under normal use. See Section 7.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes.

SECTION 11: Toxicological information

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

| | |
|-----------------------------|---------------------------------|
| Acute toxicity (oral) | : Toxic if swallowed. |
| Acute toxicity (dermal) | : Not classified (Lack of data) |
| Acute toxicity (inhalation) | : Not classified (Lack of data) |

Succinylcholine chloride dihydrate

| | |
|-----------------------------------|---|
| LD50 oral rat | 175 mg/kg |
| Skin corrosion/irritation | : Not classified (Lack of data) pH: $\geq 4 - \leq 5$ (Aqueous solution) |
| Serious eye damage/irritation | : Not classified (Lack of data) pH: $\geq 4 - \leq 5$ (Aqueous solution) |
| Respiratory or skin sensitisation | : Not classified (Lack of data) |
| Germ cell mutagenicity | : Not classified (Lack of data) |
| Carcinogenicity | : Not classified (Lack of data) |
| Reproductive toxicity | : Not classified (Lack of data) |
| STOT-single exposure | : Not classified (Lack of data) |
| STOT-repeated exposure | : Not classified (Lack of data) |
| Aspiration hazard | : Not classified (Technical impossibility to obtain the data) |

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Hazardous waste. Use suitable disposal containers.
Hazardous to the aquatic environment, short-term : Not classified (Lack of data)
(acute)
Hazardous to the aquatic environment, long-term : Not classified (Lack of data)
(chronic)

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

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Dispose in a safe manner in accordance with local/national regulations.
Product/Packaging disposal recommendations : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

| ADR | IMDG | IATA |
|---|---|--|
| 14.1. UN number or ID number | | |
| UN 2811 | UN 2811 | UN 2811 |
| 14.2. UN proper shipping name | | |
| TOXIC SOLID, ORGANIC, N.O.S. | TOXIC SOLID, ORGANIC, N.O.S. | Toxic solid, organic, n.o.s. |
| Transport document description | | |
| UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III, (E) | UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III | UN 2811 Toxic solid, organic, n.o.s., 6.1, III |
| 14.3. Transport hazard class(es) | | |
| 6.1 | 6.1 | 6.1 |

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| ADR | IMDG | IATA |
|---|---|---|
|  |  |  |
| 14.4. Packing group | | |
| III | III | III |
| 14.5. Environmental hazards | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | |

14.6. Special precautions for user

Overland transport

| | |
|---|---------------------------|
| Classification code (ADR) | : T2 |
| Special provisions (ADR) | : 274, 614 |
| Limited quantities (ADR) | : 5kg |
| Excepted quantities (ADR) | : E1 |
| Packing instructions (ADR) | : P002, IBC08, LP02, R001 |
| Special packing provisions (ADR) | : B3 |
| Mixed packing provisions (ADR) | : MP10 |
| Portable tank and bulk container instructions (ADR) | : T1 |
| Portable tank and bulk container special provisions (ADR) | : TP33 |
| Tank code (ADR) | : SGAH, L4BH |
| Tank special provisions (ADR) | : TU15, TE19 |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 2 |
| Special provisions for carriage - Bulk (ADR) | : VC1, VC2, AP7 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13, CV28 |
| Special provisions for carriage - Operation (ADR) | : S9 |
| Hazard identification number (Kemler No.) | : 60 |
| Orange plates | : 2811 |

Tunnel restriction code (ADR)

: E

Transport by sea

| | |
|------------------------------------|---|
| Special provisions (IMDG) | : 223, 274 |
| Limited quantities (IMDG) | : 5 kg |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : P002 |
| IBC packing instructions (IMDG) | : IBC08 |
| IBC special provisions (IMDG) | : B3 |
| Tank instructions (IMDG) | : T1 |
| Tank special provisions (IMDG) | : TP33 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-A |
| Stowage category (IMDG) | : A |
| Properties and observations (IMDG) | : Toxic if swallowed, by skin contact or by inhalation. |

Air transport

| | |
|--------------------------------|--------|
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y645 |

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| | | |
|--|---|--------|
| PCA limited quantity max net quantity (IATA) | : | 10kg |
| PCA packing instructions (IATA) | : | 670 |
| PCA max net quantity (IATA) | : | 100kg |
| CAO packing instructions (IATA) | : | 677 |
| CAO max net quantity (IATA) | : | 200kg |
| Special provisions (IATA) | : | A3, A5 |
| ERG code (IATA) | : | 6L |

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)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not applicable.

POP Regulation (Persistent Organic Pollutants)

Not applicable.

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

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. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

| Indication of changes | | | |
|-----------------------|---|----------|----------|
| Section | Changed item | Change | Comments |
| | Revision date | Added | |
| | Supersedes version of | Added | |
| 2.1 | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Modified | |
| 2.2 | Signal word (CLP) | Modified | |
| 2.2 | Hazard pictograms (CLP) | Modified | |

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| Indication of changes | | | |
|-----------------------|--|----------|----------|
| Section | Changed item | Change | Comments |
| 2.2 | Precautionary statements (CLP) | Modified | |
| 2.2 | Hazard statements (CLP) | Modified | |
| 4.1 | First-aid measures after ingestion | Added | |
| 4.1 | First-aid measures after inhalation | Added | |
| 4.1 | First-aid measures after skin contact | Modified | |
| 4.1 | First-aid measures after eye contact | Modified | |
| 4.2 | Symptoms/effects after ingestion | Added | |
| 4.2 | Symptoms/effects after skin contact | Added | |
| 4.2 | Symptoms/effects after inhalation | Added | |
| 4.2 | Symptoms/effects after eye contact | Added | |
| 4.3 | Other medical advice or treatment | Added | |
| 6.1 | General measures | Added | |
| 6.3 | Methods for cleaning up | Added | |
| 7.1 | Additional hazards when processed | Added | |
| 7.1 | Precautions for safe handling | Added | |
| 7.1 | Hygiene measures | Added | |
| 7.2 | Technical measures | Added | |
| 7.2 | Storage conditions | Added | |
| 8.2 | Eye protection | Added | |
| 8.2 | Respiratory protection | Added | |
| 8.2 | Hand protection | Modified | |
| 8.2 | Appropriate engineering controls | Modified | |
| 8.2 | Skin and body protection | Modified | |
| 9.1 | Odour | Added | |
| 9.1 | pH | Added | |
| 11.1 | LD50 oral rat | Added | |
| 11.1 | ATE CLP (oral) | Added | |
| 11.1 | Reason for no classification | Modified | |
| 12.1 | Ecology - general | Modified | |
| 12.1 | Reason for no classification | Added | |
| 13.1 | Product/Packaging disposal recommendations | Added | |
| 13.1 | Regional waste regulation | Added | |

Full text of H- and EUH-statements:

| | |
|---------------------|-----------------------------------|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| H301 | Toxic if swallowed. |

Safety Data Sheet (SDS), EU

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