# SIGMA-ALDRICH

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SAFETY DATA SHEET Version 4.5

Revision Date 06/27/2014 Print Date 10/31/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

| 1.1 | <b>Product identifiers</b><br>Product name                                      | :   | Sulfo-N-succinimidyl 4-maleimidobutyrate sodium salt               |
|-----|---|-----|--|
|     | Product Number<br>Brand   | :   | 42002<br>Sigma   |
|     | CAS-No.   | :   | 185332-92-7  |
| 1.2 | 2 Relevant identified uses of the substance or mixture and uses advised against |     |  |
|     | Identified uses   | :   | Laboratory chemicals, Manufacture of substances                    |
| 1.3 | Details of the supplier of the safety data sheet                                |     |  |
|     | Company   | :   | Sigma-Aldrich<br>3050 Spruce Street<br>SAINT LOUIS MO 63103<br>USA |
|     | Telephone<br>Fax  | :   | +1 800-325-5832<br>+1 800-325-5052                                 |
| 1.4 | Emergency telephone nur   | mbe | er   |
|     | Emergency Phone #   | :   | +1-703-527-3887 (CHEMTREC)   |

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram

| <br>/ |
|-------|
|       |

| Signal word  | Warning   |
|--|---|
| Hazard statement(s)<br>H315<br>H319<br>H335  | Causes skin irritation.<br>Causes serious eye irritation.<br>May cause respiratory irritation.  |
| Precautionary statement(s)<br>P261<br>P264<br>P271<br>P280<br>P302 + P352<br>P304 + P340 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.<br>Wash skin thoroughly after handling.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/ eye protection/ face protection.<br>IF ON SKIN: Wash with plenty of soap and water.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position<br>comfortable for breathing. |

| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|--------------------|--|
| P312               | Call a POISON CENTER or doctor/ physician if you feel unwell.  |
| P321               | Specific treatment (see supplemental first aid instructions on this label).  |
| P332 + P313        | If skin irritation occurs: Get medical advice/ attention.  |
| P337 + P313        | If eye irritation persists: Get medical advice/ attention.   |
| P362               | Take off contaminated clothing and wash before reuse.  |
| P403 + P233        | Store in a well-ventilated place. Keep container tightly closed.   |
| P405               | Store locked up.   |
| P501               | Dispose of contents/ container to an approved waste disposal plant.  |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

| Synonyms                    | <ul> <li>N-(γ-Maleimidobutyryloxy)sulfosuccinimide<br/>Sulfo-GMBS</li> <li>4-Maleimidobutyric acid sulfo-N-succinimidyl ester</li> </ul> |
|-----------------------------|--|
| Formula                     | : C <sub>12</sub> H <sub>11</sub> N <sub>2</sub> NaO <sub>9</sub> S  |
| Molecular Weight<br>CAS-No. | : 382.28 g/mol<br>: 185332-92-7  |

## Hazardous components

| Component  | Classification                | Concentration |
|--|-------------------------------|---------------|
| Sulfo-N-succinimidyl 4-maleimidobutyrate sodium salt                             |                               |               |
|  | Skin Irrit. 2; Eye Irrit. 2A; | -             |
|  | STOT SE 3; H315, H319,        |               |
|  | H335                          |               |
| For the full text of the H-Statements mentioned in this Section, see Section 16. |                               |               |

#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed** no data available

## **5. FIREFIGHTING MEASURES**

## 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2** Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Sodium oxides

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

| a)  | Appearance   | Form: powder      |
|---|--|-------------------|
| b)  | Odour  | no data available |
| c)  | Odour Threshold                                    | no data available |
| d)  | рН   | no data available |
| e)  | Melting point/freezing<br>point                    | no data available |
| f)  | Initial boiling point and boiling range            | no data available |
| g)  | Flash point  | no data available |
| h)  | Evapouration rate                                  | no data available |
| i)  | Flammability (solid, gas)                          | no data available |
| j)  | Upper/lower<br>flammability or<br>explosive limits | no data available |
| k)  | Vapour pressure                                    | no data available |
| I)  | Vapour density                                     | no data available |
| m)  | Relative density                                   | no data available |
| n)  | Water solubility                                   | no data available |
| o)  | Partition coefficient: n-<br>octanol/water         | no data available |
| p)  | Auto-ignition<br>temperature                       | no data available |
| q)  | Decomposition<br>temperature                       | no data available |
| r)  | Viscosity  | no data available |
| s)  | Explosive properties                               | no data available |
| t)  | Oxidizing properties                               | no data available |
| Other safety information<br>no data available |  |                   |

#### **10. STABILITY AND REACTIVITY**

## 10.1 Reactivity

9.2

no data available

#### **10.2** Chemical stability Stable under recommended storage conditions.

**10.3** Possibility of hazardous reactions no data available

## 10.4 Conditions to avoid

no data available

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#### **10.5** Incompatible materials Strong oxidizing agents

**10.6 Hazardous decomposition products** Other decomposition products - no data available In the event of fire: see section 5

## **11. TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects

## Acute toxicity

no data available

Dermal: no data available

no data available

#### Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

#### **Respiratory or skin sensitisation** no data available

#### Germ cell mutagenicity Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity**

no data available

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

#### Additional Information RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

no data available

#### 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 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

no data available

## **13. DISPOSAL CONSIDERATIONS**

## 13.1 Waste treatment methods

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)** Not dangerous goods

IMDG Not dangerous goods

## ΙΑΤΑ

Not dangerous goods

#### 15. REGULATORY INFORMATION

#### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

Acute Health Hazard

## Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

| Sulfo-N-succinimidyl 4-maleimidobutyrate sodium salt | CAS-No.<br>185332-92-7 | Revision Date |
|--|------------------------|---------------|
| New Jersey Right To Know Components                  |                        |               |
| Sulfo-N-succinimidyl 4-maleimidobutyrate sodium salt | CAS-No.<br>185332-92-7 | Revision Date |

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **16. OTHER INFORMATION**

Full text of H-Statements referred to under sections 2 and 3.

| Eye Irrit.  | Eye irritation                                   |
|-------------|--|
| H315        | Causes skin irritation.                          |
| H319        | Causes serious eye irritation.                   |
| H335        | May cause respiratory irritation.                |
| Skin Irrit. | Skin irritation                                  |
| STOT SE     | Specific target organ toxicity - single exposure |

#### **HMIS Rating**

| rinno ruunig           |   |
|------------------------|---|
| Health hazard:         | 2 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard        | 1 |
| NFPA Rating            |   |
| Health hazard:         | 2 |
| Fire Hazard:           | 0 |
| Reactivity Hazard:     | 1 |
| Health hazard:         | 2 |
| Fire Hazard:           | 0 |
| Reactivity Hazard:     | 0 |
|                        |   |

#### Further information

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#### **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 4.5

Revision Date: 06/27/2014

Print Date: 10/31/2018