

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Version: 1.2

Creation Date: 2017/09/11

Revision Date: 2019/01/04

1. Identification

Product identifier

| | |
|-----------------|--|
| Product name | 6X Laemmli SDS Sample Buffer, non-reducing |
| Product number | SBN06-15 |
| Recommended use | Biochemical reagent for research use only |

Details of the supplier of the safety data sheet

| | |
|------------------------|---|
| Manufacture / Supplier | Energenesis Biomedical Co., Ltd. |
| Address | 6F-3, No.21, Ln. 583, Ruiguang Rd., Neihu Dist. Taipei City 114, Taiwan |
| Phone | +886-2-2627-0835 |
| Fax | +886-2-2627-0836 |

Emergency telephone number +886-2-2627-0835

2. Hazard(s) identification

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP]

| | |
|---------------|------------|
| Acute Tox. 4 | H302, H312 |
| Skin Irrit. 2 | H315 |
| Eye Irrit. 2 | H319 |
| STOT SE 3 | H335 |

Label elements

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

Hazard pictogram



Signal word

Warning

Hazard statements

| | |
|------|----------------------------------|
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |

Precautionary statements

| | |
|-------------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hand thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell. |

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| P302 + P352 P304 + P340 | IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep 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. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Other hazards | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |

3. Composition/information on ingredients

| Substance/mixture | | Mixture | |
|--------------------------------|---|---|---------|
| CAS No. EC No. Index No. | Component Name Synonyms | 1272/2008 (CLP) | Percent |
| 56-81-5 200-289-5 — | Glycerol | | 50 |
| 77-86-1 201-064-4 — | Trometamol | | 4.5 |
| 151-21-3 205-788-1 — | Sodium dodecyl sulphate | Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 | 9 |
| 62625-28-9 263-653-2 — | Sodium α -(3,5-dibromo-4-oxo-2,5-cyclohexadienylydene)- α -(3,5-dibromo-4-hydroxyphenyl)toluenesulphonate | Skin Irrit. 2; H315 Eye Irrit. 2, H319 STOT SE 3; H335 | 0.03 |
| Additional information | | For the full text of the H-Statements mentioned in this Section, see Section 16. | |

4. First aid measures

| Description of first aid measures | |
|-----------------------------------|--|
| Eye Contact | Flush eyes with water as a precaution |
| Inhalation | If breathed in, move person into fresh air. If not breathing, give artificial respiration. |
| Skin Contact | Wash off with soap and plenty of water. |
| Ingestion | Never give anything by mouth to an unconscious person. Rinse mouth with water |

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Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting measures

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

No data available

Advice for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature: -20 °C

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure controls/personal protection

Control parameters

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

| Component Name | PEL-TWA | PEL-STEL | PEL-Ceiling | BEIs |
|----------------|---------|----------|-------------|------|
|----------------|---------|----------|-------------|------|

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| | | | | |
|-----------------------|----------------------|---|---------------------|---|
| CAS No. | | | | |
| Glycerol 56-81-5 | 10 mg/m ³ | — | — | — |
| Trometamol 77-86-1 | 5 mg/m ³ | — | 5 mg/m ³ | — |

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 protection | Wear chemical safety goggles. An eye wash station must be available where this product is used. |
| Skin and 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 | A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. |
| Hand protection | Wear chemically resistant gloves, Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Have a safety shower available. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Appearance | Form: liquid Color: blue |
| Odour | No data available |
| Odour Threshold | No data available |
| pH | No data available |
| Melting point/freezing point | No data available |
| Initial boiling point and boiling range | No data available |
| Flash point | No data available |
| Evaporation rate | No data available |
| Flammability (solid, gas) | No data available |
| Lower and upper explosive (flammable) limits | No data available |
| Vapor pressure | No data available |
| Vapor density | No data available |
| Relative density | No data available |
| Solubility | No data available |
| Solubility in water | No data available |
| Partition coefficient: n-octanol/ water (log Kow) | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | No data available |

10. Stability and reactivity

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|-------------------|-------------------|
| Reactivity | No data available |
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| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | No data available |
| Incompatible materials | No data available |
| Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

11. Toxicological information

Information on toxicological effects No data available

Acute toxicity

| Component Name CAS No. | Result | Species | Dose | Exposure |
|-------------------------------------|-------------|---------|--------------|----------|
| Glycerol 56-81-5 | LD50 Dermal | Rat | 21,900 mg/kg | — |
| | LD50 Oral | Rat | 12,600 mg/kg | |
| Trometamol 77-86-1 | LD50 Dermal | Rat | >5,000 mg/kg | — |
| | LD50 Oral | Rat | >5,000 mg/kg | — |
| Sodium dodecyl sulphate 151-21-3 | LD50 Dermal | Rabbit | 580 mg/kg | — |
| | LD50 Oral | Rat | 1,288 mg/kg | — |

Skin corrosion/irritation

| Component Name CAS No. | Result | Species | Exposure |
|-------------------------------------|--------------------------|---------|-------------------------|
| Sodium dodecyl sulphate 151-21-3 | Eyes - Moderate irritant | Rabbit | 10 mg (standard Draize) |
| | Skin - Mild irritant | Rabbit | 25 mg (standard Draize) |

| | |
|--|---|
| Serious eye damage/eye irritation | No data available |
| Respiratory or skin sensitisation | No data available |
| Germ cell mutagenicity | No data available |
| Carcinogenicity | 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. |
| Reproductive toxicity | 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 | No data available |

12. Ecological information

Toxicity

| Component Name CAS No. | Freshwater Algae Data | Water Flea Data | Freshwater Fish Species Data | Microto x Data | log Pow |
|---------------------------|--------------------------|--------------------|------------------------------|-------------------|------------|
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| <p>Sodium dodecyl sulphate 151-21-3</p> | <p>Desmodesmus subspicatus EC50 53 mg/L (72 h) Desmodesmus subspicatus EC50 30 - 100 mg/L (96 h) Pseudokirchneriella subcapitata EC50 3.59 – 15.6 mg/L (96 h) Pseudokirchneriella subcapitata EC50 117 mg/L (96 h)</p> | <p>Daphnia magna EC50 1.8 mg/L (48 h)</p> | <p>Pimephales promelas LC50 10.2 - 22.5 mg/L (96 h semi-static 1) Poecilia reticulata LC50 10.8 - 16.6 mg/L (96 h static 1) Poecilia reticulata LC50 13.5 - 18.3 mg/L (96 h semi-static 1) Pimephales promelas LC50 15 - 18.9 mg/L (96 h static 1) Pimephales promelas LC50 22.1 - 22.8 mg/L (96 h static 1) Lepomis macrochirus LC50 4.06 - 5.75 mg/L (96 h static 1) Lepomis macrochirus LC50 4.2 - 4.8 mg/L (96 h flow-through 1) Oncorhynchus mykiss LC50 4.3 - 8.5 mg/L (96 h static 1) Pimephales promelas LC50 5.8 - 7.5 mg/L (96 h static 1) Pimephales promelas LC50 6.2 - 9.6 mg/L (96 h 1) Pimephales promelas LC50 8 - 12.5 mg/L (96 h static 1) Brachydanio rerio LC50 9.9 - 20.1 mg/L (96 h semi-static 1) Cyprinus carpio LC50 1.31 mg/L (96 h semi-static 1) Oncorhynchus mykiss LC50 4.2 mg/L (96 h 1) Lepomis macrochirus LC50 4.5 mg/L (96 h 1) Oncorhynchus mykiss LC50 4.62 mg/L (96 h flow-through 1) Brachydanio rerio LC50 7.97 mg/L (96 h flow-through 1)</p> | <p>—</p> | <p>1.6</p> |
|---|--|---|--|----------|------------|

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects No data available

13. Disposal considerations

Waste treatment methods

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|------------------------|--|
| Product | Offer surplus and non-recyclable solutions to a licensed disposal company. |
| Contaminated packaging | Dispose of as unused product. |

14. Transport information

| | |
|--|--|
| IATA / ADR / RID / IMDG | Classified as dangerous in the meaning of transport regulations. |
| UN number | — |
| UN proper shipping name | Not dangerous goods |
| Transport hazard class(es) | — |
| Packaging group | — |
| Environmental hazards | no |
| Special precautions for user | No data available |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | No data available |

15. Regulatory information

| | |
|---|--|
| Safety, health and environmental regulations/legislation specific for the substance or mixture | This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. |
| Chemical safety assessment | No data available |

16. Other information

| | |
|----------------------|---|
| Abbreviations | |
| ADR | European Agreement Concerning the International Carriage of Dangerous Goods by Road |
| Acute Tox. | Acute toxicity |
| BEIs | Biological exposure indices |
| Eye Irrit. | Serious eye damage/eye irritation |
| IMDG | International Maritime Dangerous Goods |
| IATA | International Air Transport Association-Dangerous Goods Regulations |
| CAS | Chemical Abstracts Service (division of the American Chemical Society) |
| OSHA | Occupational Health and Safety Administration |
| PEL | Permissible Exposure Limit |
| RID | Regulations Concerning the International Carriage of Dangerous Goods by Rail |
| Skin Irrit. | Skin corrosion/irritation |
| STEL | Short Term Exposure Limit |

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|----------------------------|---|
| STOT SE | Specific target organ toxicity, single exposure; Respiratory tract irritation |
| TWA | Time Weighted Average |
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