

12/27/2023

Kit Components

| Product code | Description |
|--------------|-----------------------------------|
| A8501 | Differex™ Digestion Buffer |
| Components: | |
| A850C | Digestion Buffer |

Safety Data Sheet
acc. to OSHA HCS

Printing date 12/27/2023

Reviewed on 12/27/2023

1 Identification**Product identifier****Trade name:** Digestion Buffer**Article number:** A850C**Application of the substance / the mixture** For Laboratory Use**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Promega Corporation

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

1-800-356-9526 or (608)-274-4330

Information department: SDS author: chemicalregulatory@promega.com**Emergency telephone number:**

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification**Classification of the substance or mixture**

GHS07

Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

Eye Irritation 2A

H319 Causes serious eye irritation.

Label elements**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS07

Signal word Warning**Hazard-determining components of labeling:**

Lauroyl-Sarcosine Sodium Salt

Hazard statements

Harmful if inhaled.

Causes serious eye irritation.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

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*Use only outdoors or in a well-ventilated area.**Wear eye protection / face protection.**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Call a poison center/doctor if you feel unwell.**If eye irritation persists: Get medical advice/attention.***Classification system:****NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Irritant**Primary route(s) of entry:**

Dermal

Inhalation

Target Organ(s): Not applicable or unknown**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures**Description:***The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.***Dangerous components:**

| | | |
|----------|-------------------------------|------|
| 137-16-6 | Lauroyl-Sarcosine Sodium Salt | 1-5% |
|----------|-------------------------------|------|

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures**General information:***Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.***After inhalation:***Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.**In case of unconsciousness place patient stably in side position for transportation.**Seek medical treatment in case of complaints.***After skin contact:** Generally the product does not irritate the skin.**After eye contact:***Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.***After swallowing:** If the patient feels unwell or is concerned, obtain medical advice.

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Information for doctor:**Most important symptoms and effects, both acute and delayed**

None

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* **5 Fire-fighting measures****Extinguishing media****Suitable extinguishing agents:**CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**Special hazards arising from the substance or mixture**

None known

No further relevant information available.

Advice for firefighters No special advice.**Protective equipment:** Mouth respiratory protective device.* **6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Remove persons from danger area.

Wear protective clothing.

Environmental precautions: Dilute with plenty of water.**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 13 for disposal information.

* **7 Handling and storage****Handling:****Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires: The product is not flammable.**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** Do not store below -20°C. Protected from light.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands: Not required.

Material of gloves

Gloves impermeable to the specific chemical substance.

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection:

Safety glasses

Use equipment for eye protection tested and approved under government NIOSH standards.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

| | |
|------------------------|-----------------|
| Form: | Fluid |
| Color: | Colorless |
| Odor: | Odorless |
| Odor threshold: | Not determined. |

pH-value at 20 °C (68 °F): 8

Change in condition

| | |
|-------------------------------------|-----------------|
| Melting point/Melting range: | 0 °C (32 °F) |
| Boiling point/Boiling range: | 100 °C (212 °F) |
| Flash point: | Not applicable. |

Flammability (solid, gaseous): Not applicable.

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| | |
|---|---|
| Decomposition temperature: | Not determined. |
| Ignition temperature: | Product is not selfigniting. |
| Danger of explosion: | Product does not present an explosion hazard. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapor pressure: | Not determined. |
| Density at 20 °C (68 °F): | 1.002 g/cm ³ (8.36169 lbs/gal) |
| Relative density | Not determined. |
| Vapor density | Not determined. |
| Evaporation rate | Not determined. |
| Solubility in / Miscibility with | |
| Water: | Fully miscible. |
| Partition coefficient (n-octanol/water): | Not determined. |
| Viscosity: | |
| Dynamic at 20 °C (68 °F): | 0.0952 mPas |
| Kinematic: | Not determined. |
| Solvent separation test | |
| Water: | 98.3 % |
| VOC content: | 0.00 % |
| Solids content: | 0.3 % |
| Other information | No further relevant information available. |

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

137-16-6 Lauroyl-Sarcosine Sodium Salt

| | | |
|------------|----------|-----------------|
| Inhalative | LC50/4 h | 0.05 mg/l (Rat) |
|------------|----------|-----------------|

Primary irritant effect:

on the skin: Causes skin irritation.

on the eye: Irritating effect.

Sensitization:

In case of skin contact: not sensitising

In case of inhalation: not sensitising

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Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:
OECD test guideline 471, Ames test.

Harmful

Irritant

Carcinogenic categories**IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity**Aquatic toxicity:** Not harmful to the aquatic environment**Persistence and degradability**

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.**Ecotoxicological effects:****Remark:** Not available**Additional ecological information:****General notes:** Not available.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

13 Disposal considerations

Waste treatment methods**Recommendation:**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport information

| | |
|---|--|
| UN-Number | UN3287 |
| DOT, ADR, IMDG, IATA | |
| UN proper shipping name | None |
| DOT | Toxic liquid, inorganic, n.o.s. (Lauroyl-Sarcosine Sodium Salt) |
| ADR | 3287 TOXIC LIQUID, INORGANIC, N.O.S. (Lauroyl-Sarcosine Sodium Salt) |
| IMDG, IATA | TOXIC LIQUID, INORGANIC, N.O.S. (Lauroyl-Sarcosine Sodium Salt) |
| Transport hazard class(es) | None |
| DOT | |
|  | |
| Class | 6.1 Toxic substances |
| Label | 6.1 |
| ADR | |
|  | |
| Class | 6.1 (T4) Toxic substances |
| Label | 6.1 |
| IMDG, IATA | |
|  | |
| Class | 6.1 Toxic substances |
| Label | 6.1 |
| Packing group | None |
| DOT, ADR, IMDG, IATA | III |
| Environmental hazards: | Not applicable. |
| Special precautions for user | Warning: Toxic substances |
| Hazard identification number (Kemler code): | 60 |
| EMS Number: | F-A,S-A |
| Stowage Category | A |
| Stowage Code | SW2 Clear of living quarters. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

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Transport/Additional information:**ADR****Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

IMDG**Limited quantities (LQ)**

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":

UN 3287 TOXIC LIQUID, INORGANIC, N.O.S. (LAUROYL-SARCOSINE SODIUM SALT), 6.1, III

15 Regulatory information

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

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:

All components have the value ACTIVE.

Hazardous Air Pollutants

None of the ingredients are listed.

Proposition 65**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

None of the ingredients are listed.

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Cancerogenity categories**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

TLV (Threshold Limit Value)

None of the ingredients are listed.

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NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).**Signal word** Warning**Hazard-determining components of labeling:**

Lauroyl-Sarcosine Sodium Salt

Hazard statements

Harmful if inhaled.

Causes serious eye irritation.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear eye protection / face protection.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

National regulations: No information available**Water hazard class:** Generally not hazardous for water.**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation

Chemical Regulatory Department

2800 Woods Hollow Road

Madison, WI

Ph: (608) 274-4330

chemicalregulatory@promega.com

Contact:**Date of preparation / last revision** 12/27/2023**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

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*PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Acute Toxicity - Inhalation 4: Acute toxicity – Category 4**Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A*

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