

## 1 Identification

- **Product identifier**
- **Trade name:** *Lithium Dodecyl Sulfate, ultra pure*
- **Article number:** 800752
- **CAS Number:**  
2044-56-6
- **EC number:**  
218-058-2
- **Molecular Formula**  $C_{12}H_{25}O_2S Li$
- **Molecular Weight** 272.33
- **Application of the substance / the mixture** *For Research Use Only*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
United States  
www.mpbio.com
- **Information department:** *Quality Control Department*
- **Emergency telephone number:** *CHEMTREC: 1-800-424-9300 (1-703-527-3887)*

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Sol. 2 H228 Flammable solid.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

· **GHS label elements** *The substance is classified and labeled according to the Globally Harmonized System (GHS).*

- **Hazard pictograms**



GHS02



GHS05



GHS07

- **Signal word** *Danger*

· **Hazard-determining components of labeling:**  
*lithium dodecyl sulphate*

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

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**Trade name:** Lithium Dodecyl Sulfate, ultra pure

(Contd. of page 1)

- **Hazard statements**

Flammable solid.  
Causes skin irritation.  
Causes serious eye damage.  
May cause respiratory irritation.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin: Wash with plenty of water.  
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.  
Immediately call a poison center/doctor.  
Specific treatment (see on this label).  
Take off contaminated clothing and wash it before reuse.  
If skin irritation occurs: Get medical advice/attention.  
In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	2	Fire = 2
REACTIVITY	2	Reactivity = 2

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

2044-56-6 lithium dodecyl sulphate

- **Identification number(s)**

- **EC number:** 218-058-2

US

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

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**Trade name: Lithium Dodecyl Sulfate, ultra pure**

(Contd. of page 2)

## 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.
- **After inhalation:** If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- **After skin contact:** Wash off with soap and plenty of water. Consult a Doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** 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:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Use neutralizing agent.  
Pick up mechanically, dispose contaminated material as waste according to Section 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**  
Substance is not listed.

· **PAC-2:**  
Substance is not listed.

· **PAC-3:**  
Substance is not listed.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Thorough dedusting.  
Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

Reviewed on 07/20/2018

**Trade name:** *Lithium Dodecyl Sulfate, ultra pure*

(Contd. of page 3)

- **Information about protection against explosions and fires:**  
*Keep ignition sources away - Do not smoke.*  
*Protect against electrostatic charges.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15-30°C
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Further information about storage conditions:**
- **Specific end use(s)** *No further relevant information available.*

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see Section 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** *Not required.*
- **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 skin.*  
*Avoid contact with the eyes and skin.*
- **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:**



Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*  
*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

- **Material of gloves**  
*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.*
- **Penetration time of glove material**  
*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- **Eye protection:**



Tightly sealed goggles

US

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

Reviewed on 07/20/2018

Trade name: *Lithium Dodecyl Sulfate, ultra pure*

(Contd. of page 4)

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Crystalline powder

- **Color:** White

- **Odor:** Indeterminate

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

- **Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Product is not flammable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Not determined.

- **Danger of explosion:** Not determined.

- **Explosion limits:**

- **Lower:** Not Applicable

- **Upper:** Not Applicable

- **Vapor pressure:** Not applicable.

- **Density:** Not Applicable

- **Relative density** Not determined.

- **Vapor density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with** Not Determined

- **Water:** Not determined.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

- **Dynamic:** Not applicable.

- **Kinematic:** Not applicable.

- **VOC content:** 0.00 %

- 0.0 g/l / 0.00 lb/gl

- **Solids content:** 100.0 %

- **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.

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/20/2018

Reviewed on 07/20/2018

**Trade name:** *Lithium Dodecyl Sulfate, ultra pure*

(Contd. of page 5)

· **Hazardous decomposition products:** *No dangerous decomposition products known.*

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** *Irritant to skin and mucous membranes.*
- **on the eye:** *Strong irritant with the danger of severe eye injury.*
- **Sensitization:** *No sensitizing effects known.*
- **Additional toxicological information:**
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

*Substance is not listed.*

· **NTP (National Toxicology Program)**

*Substance is not listed.*

· **OSHA-Ca (Occupational Safety & Health Administration)**

*Substance is not listed.*

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*
- **Behavior in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**
- *Water hazard class 2 (Assessment by list): hazardous for water*
- *Do not allow product to reach ground water, water course or sewage system.*
- *Must not reach bodies of water or drainage ditch undiluted or unneutralized.*
- *Danger to drinking water if even small quantities leak into the ground.*
- **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:**
- *Can not be disposed together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** *Discard must be made according to official regulations.*

US

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

Reviewed on 07/20/2018

Trade name: *Lithium Dodecyl Sulfate, ultra pure*

(Contd. of page 6)

## 14 Transport information

<i>· UN-Number</i>	
<i>· DOT, ADR, IMDG, IATA</i>	UN1325
<i>· UN proper shipping name</i>	
<i>· DOT</i>	Flammable solids, organic, n.o.s. (lithium dodecyl sulphate)
<i>· ADR</i>	1325 Flammable solids, organic, n.o.s. (lithium dodecyl sulphate)
<i>· IMDG, IATA</i>	FLAMMABLE SOLID, ORGANIC, N.O.S. (lithium dodecyl sulphate)
<i>· Transport hazard class(es)</i>	
<i>· DOT</i>	
<i>· Class</i>	4.1 Flammable solids, self-reactive substances and solid desensitised explosives
<i>· Label</i>	4.1
<i>· ADR, IMDG, IATA</i>	
<i>· Class</i>	4.1 Flammable solids, self-reactive substances and solid desensitised explosives
<i>· Label</i>	4.1
<i>· Packing group</i>	
<i>· DOT, ADR, IMDG, IATA</i>	III
<i>· Environmental hazards:</i>	Not applicable.
<i>· Special precautions for user</i>	Warning: Flammable solids, self-reactive substances and solid desensitised explosives
<i>· Danger code (Kemler):</i>	40
<i>· EMS Number:</i>	F-A,S-G
<i>· Stowage Category</i>	B
<i>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</i>	Not applicable.
<i>· Transport/Additional information:</i>	
<i>· DOT</i>	
<i>· Quantity limitations</i>	On passenger aircraft/rail: 25 kg On cargo aircraft only: 100 kg
<i>· ADR</i>	
<i>· Excepted quantities (EQ)</i>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
<i>· IMDG</i>	
<i>· Limited quantities (LQ)</i>	5 kg

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/20/2018

Reviewed on 07/20/2018

**Trade name:** Lithium Dodecyl Sulfate, ultra pure

(Contd. of page 7)

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **UN "Model Regulation":**

UN 1325 FLAMMABLE SOLIDS, ORGANIC, N.O.S. (LITHIUM DODECYL SULPHATE), 4.1, III

## 15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **TSCA new (21st Century Act) (Substances not listed)**

2044-56-6 | lithium dodecyl sulphate

· **Proposition 65**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

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

Substance is not listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS05

GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

lithium dodecyl sulphate

(Contd. on page 9)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/20/2018

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**Trade name: Lithium Dodecyl Sulfate, ultra pure**

(Contd. of page 8)

· **Hazard statements**

- Flammable solid.
- Causes skin irritation.
- Causes serious eye damage.
- May cause respiratory irritation.

· **Precautionary statements**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Ground/bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling.
  - Use only outdoors or in a well-ventilated area.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If on skin: Wash with plenty of water.
  - 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.
  - Immediately call a poison center/doctor.
  - Specific treatment (see on this label).
  - Take off contaminated clothing and wash it before reuse.
  - If skin irritation occurs: Get medical advice/attention.
  - In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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:** Quality Control Dept.
- **Date of preparation / last revision** 07/20/2018 / -

· **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport 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
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial 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)
- 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
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Flam. Sol. 2: Flammable solids – Category 2
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3