

# Bioland Scientific LLC

## Material Safety Data Sheet

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Sodium dodecyl sulfate**

Catalog Number CS01  
Brand Bioland Chemicals

Company Bioland Scientific LLC  
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Paramount, CA 90723  
USA

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Lauryl sulfate sodium salt, Sodium lauryl sulfate, Dodecyl sodium sulfate, Dodecyl sulfate sodium salt, SDS

Formula: C<sub>12</sub>H<sub>25</sub>NaO<sub>4</sub>S  
Molecular Weight: 288.38 g/mol

CAS-No.	EC-No.	Index-No.	%
151-21-3	205-788-1		99% -100%

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

**OSHA Hazards:** Flammable solid, Target Organ Effect, Harmful by ingestion., Toxic by skin absorption, Irritant

#### HMIS Classification

**Health Hazard:** 2  
**Flammability:** 3  
**Physical hazards:** 1

#### NFPA Rating

**Health Hazard:** 2  
**Fire :** 3  
**Reactivity Hazard:** 1

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** Toxic if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. The toxicological properties of this substance have not been fully investigated.

#### 4. 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**

Move person to fresh air immediately. If not breathing give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing.

Consult a physician.

##### **In case of eye contact**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.

##### **If swallowed**

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

#### 5. FIRE-FIGHTING MEASURES

##### **Conditions of flammability**

Flammable in the presence of a source of ignition, through friction or retained heat. Keep away from heat/sparks/open flame/hot surface. No smoking.

##### **Suitable extinguishing media**

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

##### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

##### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Sodium oxides

##### **Further information**

Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions**

Use personal protective equipment as indicated in Section 8. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods for cleaning up**

Vacuum or sweep up material and place into in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

##### **Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

##### **Storage**

Keep container tightly closed in a dry and cool place. Hygroscopic.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand 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.

#### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: solid powder

### Safety data

pH: 7.2 (0.5 M solution)

Melting point: Melting point/range: 204 - 207 °C (399 - 405 °F) - lit.

Boiling point: no data available

Flash point: no data available

Ignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Density 0.370 g/cm<sup>3</sup>

Water solubility soluble

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures.

### Conditions to Avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### Incompatibilities with Other Materials

Oxidizing agents

**Hazardous Decomposition Products:** Carbon oxides, Sulphur oxides, Sodium oxides

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 1,288 mg/kg

#### Inhalation LC50

rat - 1 h - > 3,900 mg/m<sup>3</sup>

#### Dermal LD50

LD50 Dermal - rabbit - 580 mg/kg

### Other information on acute toxicity

no data available

### Skin corrosion/irritation

Skin - rabbit - Skin irritation - 24 h

### Serious eye damage/eye irritation

Eyes - rabbit - Eye irritation

### Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product presents 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 presents 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 presents 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 presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

### Teratogenicity

no data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

### Aspiration hazard

no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** Toxic if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Signs and Symptoms of Exposure**

sneezing, The sodium salt of dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes, and passive smoking.

**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 19.5 mg/l - 96 h

mortality LOEC - Pimephales promelas (fathead minnow) - 4.6 mg/l - 8 d

LC50 - Oncorhynchus mykiss (rainbow trout) - 3.6 mg/l - 96 h

Toxicity to algae Growth inhibition LOEC - Pseudokirchneriella subcapitata - 2.68 mg/l - 6 d

**Persistence and degradability**

no data available

**Bioaccumulative potential**

Bioaccumulation Cyprinus carpio (Carp) - 72 h

Bioconcentration factor (BCF): 3.9 - 5.3

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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)**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II

Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulphate)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II EMS-No: F-A, S-G

Proper shipping name: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Sodium dodecyl sulphate)

Marine pollutant: No

**IATA**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II

Proper shipping name: Flammable solid, toxic, organic, n.o.s. (Sodium dodecyl sulphate)

## 15. REGULATORY INFORMATION

### OSHA Hazards

Flammable solid, Target Organ Effect, Harmful by ingestion., Toxic by skin absorption, Irritant

### DSL Status

All components of this product are on the Canadian DSL list.

### 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

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

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

### Pennsylvania Right To Know Components

Sodium dodecyl sulphate CAS-No.151-21-3

### New Jersey Right To Know Components

Sodium dodecyl sulphate, CAS-No. 151-21-3

### 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

### Product Use:

For research use only.

### Disclaimer:

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**Bioland Scientific LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. BIOLAND SCIENTIFIC LLC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, BIOLAND SCIENTIFIC LLC WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**