

07/04/2016

### Kit Components

Product code	Description
--------------	-------------

<b>H5112</b>	<b>Sodium Dodecyl Sulphate, 250gm</b>
--------------	---------------------------------------

Components:

H511	Sodium Dodecyl Sulphate (SDS)
------	-------------------------------



**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**1 Identification**

**Product identifier**

**Trade name:** Sodium Dodecyl Sulphate (SDS)

**Article number:** H511

**CAS Number:**

151-21-3

**EC number:**

205-788-1

**Application of the substance / the mixture** Laboratory chemicals

**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: [Regulatory.Affairs@promega.com](mailto:Regulatory.Affairs@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**



GHS02 Flame

Flam. Sol. 1 H228 Flammable solid.



GHS08 Health hazard

STOT SE 2 H371 May cause damage to organs.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 1)

*Acute Tox. 4 H332 Harmful if inhaled.*

*Skin Irrit. 2 H315 Causes skin irritation.*

**Label elements**

**GHS label elements**

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

**Hazard pictograms** GHS02, GHS05, GHS07, GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

*sodium dodecyl sulphate*

**Hazard statements**

*Flammable solid.*

*Harmful if swallowed or if inhaled.*

*Causes skin irritation.*

*Causes serious eye damage.*

*May cause damage to organs.*

**Precautionary statements**

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wear protective gloves / eye protection / face protection.*

*Keep away from heat/sparks/open flames/hot surfaces. No smoking.*

*Ground/bond container and receiving equipment.*

*Use only outdoors or in a well-ventilated area.*

*IF ON SKIN: Wash with plenty of water.*

*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.*

*IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*

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

*If skin irritation occurs: Get medical advice/attention.*

*Rinse mouth.*

*In case of fire: Use for extinction: CO2, powder or water spray.*

*IF exposed or concerned: Call a POISON CENTER/doctor.*

*Take off contaminated clothing and wash it before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

**Classification system:**

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

*Health = 3*

*Fire = 3*

*Reactivity = 0*

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

*Health = 2*

*Fire = 3*

*Reactivity = 0*

**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):**

*Highly Toxic*

*Irritant*

*Environmental Toxin*

*Environmental Hazard*

**Primary route(s) of entry:**

*Dermal*

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 2)

*Inhalation**Oral***Target Organ(s):** *May affect Vascular System***Other hazards** *Keep away from sources of ignition.***Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.*

### 3 Composition/information on ingredients

**Chemical characterization:** *Substances***CAS No. Description***151-21-3 sodium dodecyl sulphate***Identification number(s)****EC number:** *205-788-1*

### 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:***Immediately wash with water and soap and rinse thoroughly.**If skin irritation continues, consult a doctor.***After eye contact:** *Rinse opened eye for several minutes under running water.***After swallowing:** *Seek immediate medical advice.***Information for doctor:****Most important symptoms and effects, both acute and delayed***Headache**Dizziness**Dizziness**Nausea***Indication of any immediate medical attention and special treatment needed***No further relevant information available.*

### 5 Fire-fighting measures

**Extinguishing media****Suitable extinguishing agents:***CO<sub>2</sub>, 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***Advice for firefighters***No special advice**In the case of fire, wear respiratory protective equipment and chemical protective suit.*

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 3)

**Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

### **Personal precautions, protective equipment and emergency procedures**

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

Keep away from ignition sources

Wear protective clothing.

### **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

### **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to Section 13.

Pick up mechanically.

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**

Thorough dedusting.

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Use only in well ventilated areas.

#### **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:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**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.

## 8 Exposure controls/personal protection

### **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.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 4)

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Clean skin thoroughly immediately after handling the product.

**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

Select the glove material considering penetration time, rate of diffusion and degradation time.

It is recommended that the selected protective gloves be tested and approved under NIOSH or EU Directive 89/686/EEC and the standard EN 374 derived from it.

**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.

**Eye protection:**

Tightly sealed goggles

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:**

<b>Form:</b>	Powder
<b>Color:</b>	Whitish
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

**pH-value:** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	204 °C (399 °F)
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Flammable.

**Ignition temperature:**

**Decomposition temperature:** Not determined.

**Auto igniting:** Not determined.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**Vapor pressure:** Not applicable.

**Density at 20 °C (68 °F):** 0.67 g/cm<sup>3</sup> (5.591 lbs/gal)

**Relative density** Not determined.

**Vapor density** Not applicable.

**Evaporation rate** Not applicable.

**Solubility in / Miscibility with**

**Water at 20 °C (68 °F):** 100 g/l

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 5)

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

**Viscosity:**

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

**Organic solvents:** 0.0 %

**Solids content:** 99.0 %

**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:** Oxidizing agents

**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:**

**151-21-3 sodium dodecyl sulphate**

Oral	LD50	1288 mg/kg (Rat)
Irritation of skin	acute	50 mg/ 24H (Rabbit)
		Severe

**Primary irritant effect:**

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:**

Strong irritant with the danger of severe eye injury.

Irritating effect.

**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:** Not harmful to the aquatic environment

(Contd. on page 7)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 6)

**Persistence and degradability** Not available

**Behavior in environmental systems:**

**Bioaccumulative potential** Not known

**Mobility in soil** No further relevant information available.

**Ecotoxicological effects:**

**Remark:** Toxic for fish

**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.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

**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.

## 14 Transport information

**UN-Number**

**DOT, ADR, IMDG, IATA**

UN1325

**UN proper shipping name**

**DOT**

Flammable solids, organic, n.o.s. (sodium dodecyl sulphate)

**ADR**

1325 Flammable solids, organic, n.o.s. (sodium dodecyl sulphate),

ENVIRONMENTALLY HAZARDOUS

**IMDG, IATA**

FLAMMABLE SOLID, ORGANIC, N.O.S. (sodium dodecyl sulphate)

**Transport hazard class(es)**

**DOT**



**Class**

4.1 Flammable solids, self-reactive substances and solid desensitised explosives

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

Trade name: Sodium Dodecyl Sulphate (SDS)

(Contd. of page 7)

**Label** 4.1**ADR****Class** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives**Label** 4.1**IMDG, IATA****Class** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives**Label** 4.1**Packing group**  
DOT, ADR, IMDG, IATA II**Environmental hazards:**  
**Marine pollutant:** No  
**Special marking (ADR):** Symbol (fish and tree)**Special precautions for user** Warning: Flammable solids, self-reactive substances and solid desensitised explosives**EMS Number:** F-A,S-G  
**Stowage Category** B**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.**Transport/Additional information:****ADR****Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g**IMDG****Limited quantities (LQ)** 1 kg  
**Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g**UN "Model Regulation":** UN 1325 FLAMMABLE SOLIDS, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE), 4.1, II, ENVIRONMENTALLY HAZARDOUS

US

(Contd. on page 9)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 8)

## 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.*

**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.*

**Carcinogenicity 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).*

**Signal word** *Danger*

**Hazard-determining components of labeling:**

*sodium dodecyl sulphate*

**Hazard statements**

*Flammable solid.*

*Harmful if swallowed or if inhaled.*

*Causes skin irritation.*

*Causes serious eye damage.*

*May cause damage to organs.*

**Precautionary statements**

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wear protective gloves / eye protection / face protection.*

*Keep away from heat/sparks/open flames/hot surfaces. No smoking.*

*Ground/bond container and receiving equipment.*

*Use only outdoors or in a well-ventilated area.*

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/04/2016

Reviewed on 07/03/2016

**Trade name: Sodium Dodecyl Sulphate (SDS)**

(Contd. of page 9)

**IF ON SKIN:** Wash with plenty of water.

**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.

**IF SWALLOWED:** Call a POISON CENTER/doctor if you feel unwell.

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

If skin irritation occurs: Get medical advice/attention.

Rinse mouth.

**In case of fire:** Use for extinction: CO<sub>2</sub>, powder or water spray.

**IF exposed or concerned:** Call a POISON CENTER/doctor.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:**

**Water hazard class:** Water hazard class 2 (Assessment by list): 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

Environmental Health and Safety Department

2800 Woods Hollow Road

Madison, WI

Ph: (608)274-4330

**Date of preparation / last revision** 07/04/2016 / -

**Abbreviations and acronyms:**

**RID:** Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

**ICAO:** International Civil Aviation Organization

**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)

**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

**PEL:** Permissible Exposure Limit

**REL:** Recommended Exposure Limit

**Flam. Sol. 1:** Flammable solids – Category 1

**Acute Tox. 4:** Acute toxicity – Category 4

**Skin Irrit. 2:** Skin corrosion/irritation – Category 2

**Eye Dam. 1:** Serious eye damage/eye irritation – Category 1

**STOT SE 2:** Specific target organ toxicity (single exposure) – Category 2

**\* Data compared to the previous version altered.**