

# **SAFETY DATA SHEET**

Creation Date 24-Nov-2010 Revision Date 13-Oct-2023 Revision Number 8

# 1. Identification

Product Name Sodium Lauryl Sulfate (NF/FCC)

Cat No.: \$529-3; \$529-500

**CAS No** 151-21-3

Synonyms Sodium lauryl sulfate; SDS; Dodecyl Sodium Sulfate

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

### Company

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

#### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Combustible dust

Category 1

Yes

#### Label Elements

## Signal Word

Danger

## **Hazard Statements**

May form combustible dust concentrations in air Harmful if swallowed

Causes skin irritation
Causes serious eye damage



#### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

#### Skin

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

### Eyes

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 or doctor/physician

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

# Storage

Store in a well-ventilated place. Keep container tightly closed

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Sodium lauryl sulfate	151-21-3	>95

## 4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

Causes severe eye damage.

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point  $> 150 \, ^{\circ}\text{C} \, / > 302 \, ^{\circ}\text{F}$ 

Method - No information available

Autoignition Temperature 250 °C / 482 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Dust can form an explosive mixture with air. Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides. Sodium oxides.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
3	3	1	N/A

## 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust

formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed

**Up** containers for disposal.

7. Handling and storage							
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.						
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible						

Materials. Strong oxidizing agents. Strong acids. Strong bases.

# 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

**Eve/face Protection** Wear appropriate protective eveglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166. Tight sealing safety goggles.

Wear appropriate protective gloves and clothing to prevent skin exposure. Skin and body protection

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended Filter type:** Particulates filter conforming to EN 143.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures** 

# 9. Physical and chemical properties

Physical State Solid Off-white **Appearance** Odorless Odor

**Odor Threshold** No information available Ha

8.5-10 1% ag.sol

No data available 206 °C / 402.8 °F Melting Point/Range **Boiling Point/Range** No information available

Flash Point > 150 °C / > 302 °F

**Evaporation Rate** Not applicable

No information available Flammability (solid,gas)

Flammability or explosive limits

**Bulk Density** 

No data available Upper Lower No data available No information available **Vapor Pressure** 

Vapor Density Not applicable

**Specific Gravity** No information available >400 g/l

Solubility Soluble in water Partition coefficient; n-octanol/water No data available

250 °C / 482 °F **Autoignition Temperature Decomposition Temperature** No information available

**Viscosity** Not applicable C12 H25 Na O4 S Molecular Formula

288.38 **Molecular Weight** 

# 10. Stability and reactivity

**Reactive Hazard** No

Stability Hygroscopic.

**Conditions to Avoid** Excess heat. Incompatible products. Avoid dust formation. Exposure to moist air or water.

Strong oxidizing agents, Strong acids, Strong bases **Incompatible Materials** 

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides, Sodium oxides

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

Category 4. ATE = 300 - 2000 mg/kg. Oral LD50

**Dermal LD50** Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 5 mg/l. Mist LC50

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Sodium lauryl sulfate	1288 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	LC50 > 3900 mg/m <sup>3</sup> (Rat) 1 h	

**Toxicologically Synergistic** 

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available

Irritation Irritating to eyes and skin Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium lauryl sulfate	151-21-3	Not listed				

No information available **Mutagenic Effects** 

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard** 

Symptoms / effects, both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

## **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Contains a substance which is:. Toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium lauryl sulfate	EC50: 3.59 - 15.6 mg/L, 96h	LC50: 10.2 - 22.5 mg/L, 96h	Not listed	EC50: = 1.8 mg/L, 48h
	static (Pseudokirchneriella	semi-static (Pimephales		(Daphnia magna)
	subcapitata)	promelas)		
	EC50: = 117 mg/L, 96h	LC50: 5.8 - 7.5 mg/L, 96h		
	(Pseudokirchneriella	static (Pimephales		
	subcapitata)	promelas)		
	EC50: 30 - 100 mg/L, 96h	LC50: = 4.5 mg/L, 96h		
	(Desmodesmus	(Lepomis macrochirus)		
	subspicatus)	LC50: 4.2 - 4.8 mg/L, 96h		
	EC50: = 53 mg/L, 72h	flow-through (Lepomis		
	(Desmodesmus	macrochirus)		
	subspicatus)	LC50: 4.06 - 5.75 mg/L, 96h		
		static (Lepomis macrochirus)		
		LC50: 9.9 - 20.1 mg/L, 96h		
		semi-static (Brachydanio		

	rerio)	
	LC50: = 7.97 mg/L, 96h	
	flow-through (Brachydanio	
	rerio)	
	LC50: = 4.2 mg/L, 96h	
	(Oncorhynchus mykiss)	
	LC50: = 4.62 mg/L, 96h	
	flow-through (Oncorhynchus	
	mykiss)	
	LC50: 4.3 - 8.5 mg/L, 96h	
	static (Oncorhynchus	
	mykiss)	
	LC50: 22.1 - 22.8 mg/L, 96h	
	static (Pimephales	
	promelas)	
	LC50: 8 - 12.5 mg/L, 96h	
	static (Pimephales	
	promelas)	
	LC50: 15 - 18.9 mg/L, 96h	
	static (Pimephales	
	promelas)	
	LC50: = 1.31 mg/L, 96h	
	semi-static (Cyprinus carpio)	
	LC50: 10.8 - 16.6 mg/L, 96h	
	static (Poecilia reticulata)	
	LC50: 13.5 - 18.3 mg/L, 96h	
	semi-static (Poecilia	
	reticulata)	
	LC50: 6.2 - 9.6 mg/L, 96h	
	(Pimephales promelas)	
	(lopilaido promoido)	
		l .

Persistence and Degradability

Persistence is unlikely

**Bioaccumulation/ Accumulation** 

No information available.

Mobility

. Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Sodium lauryl sulfate	1.6

# 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

	14. Transport information	
DOT	Not regulated	
TDC	Not requilated	

TDG Not regulated Not regulated Not regulated Not regulated Not regulated Not regulated Not regulated

# 15. Regulatory information

# United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Sodium lauryl sulfate	151-21-3	Χ	ACTIVE	-

## Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

<sup>&#</sup>x27;-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium lauryl sulfate	151-21-3	Х	-	205-788-1	Х	Χ	Х	Χ	Х	KE-21884

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

 California Proposition 65
 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

**U.S.** Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

Authorisation/Restrictions according to EU REACH Not applicable

	Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	J	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
ſ	Sodium lauryl sulfate	151-21-3	-	-	-

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sodium lauryl sulfate	151-21-3	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

## Other International Regulations

Component	(	CAS No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
			(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
			<b>Qualifying Quantities</b>	<b>Qualifying Quantities</b>	, ,	,
			for Major Accident	for Safety Report		
			Notification	Requirements		
Sodium lauryl sulfa	ite 1	151-21-3	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**