

# SAFETY DATA SHEET

Creation Date 12-July-1999 Revision Date 24-December-2021 **Revision Number 4** 

1. Identification

Sodium dodecyl sulfate 10% to 20% solutions **Product Name** 

BP1311-1; BP1311-200 Cat No.:

Synonyms Sodium lauryl 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

Importer/Distributor Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Manufacturer

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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Category 2 Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 1

Label Elements

Signal Word

Danger

**Hazard Statements** 

Causes skin irritation Causes serious eye damage



## **Precautionary Statements**

### Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF ON SKIN: Wash with plenty of soap and 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

Take off contaminated clothing

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	80-90
Sodium lauryl sulfate	151-21-3	10-20

# 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.

Most important symptoms/effects

Notes to Physician

Causes severe eye damage.

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 Not applicable

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper

No information available

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**

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Sulfur oxides. Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

## **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	0	0	N/A

# 6. Accidental release measures

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

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

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Up

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.					
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible					

Materials. Strong oxidizing agents.

# 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**

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

**Eye Protection** Goggles

**Hand Protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use, observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, gloves with care avoiding skin contamination.

### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

### **Environmental exposure controls**

Prevent product from entering drains. Do not allow material to contaminate ground water system.

## **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

Physical State Liquid

Appearance Clear, Colourless
Odor No information available
Odor Threshold No information available

pH 9.1 (1%)
Melting Point/Range No data available

Boiling Point/Range > 100 °C / > 212 °F @ 760 mmHg

Flash Point Not applicable

**Evaporation Rate**No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper<br/>LowerNo data available<br/>No data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 1.01

SolubilitySoluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity No information available

Molecular Weight 288.38

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under recommended storage conditions.

Conditions to Avoid Excess heat. Incompatible products.

Incompatible Materials Strong oxidizing agents

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

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

**Hazardous Reactions**None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Oral LD50

**Dermal LD50** Category 4. ATE = 1000 - 2000 mg/kg.

Based on ATE data, the classification criteria are not met. ATE > 20 mg/l. Vapor LC50

**Component Information** 

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

**Toxicologically Synergistic** 

No information available

**Products** 

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

Irritation Irritating to eyes and skin Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed				
Sodium lauryl sulfate	151-21-3	Not listed				

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

No information available. **Developmental Effects** 

No information available. **Teratogenicity** 

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

**Aspiration hazard** No information available

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**

Contains a substance which is:. Harmful 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		
	1 ' '	static (Lepomis macrochirus)		
		LC50: 9.9 - 20.1 mg/L. 96h		

semi-static (Brachydanio		
rerio)		
LC50: = 7.97  mg/L, 96h		
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)		
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)		
	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: 15 - 18.9 mg/L, 96h static (Pimephales promelas) LC50: 15 - 18.9 mg/L, 96h static (Pomephales 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	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: 15 - 18.9 mg/L, 96h static (Pimephales promelas) LC50: 1.31 mg/L, 96h static (Poprinus 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

Persistence and Degradability

Soluble in water Persistence is unlikely based on information available.

**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 TDG IATA	Not regulated
_TDG	Not regulated
<u>IATA</u>	Not regulated
IMDG/IMO	Not regulated

15. Regulatory information

### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	notific	ventory ation - nactive	EINECS	ELINCS	NLP
Water	7732-18-5	X	-	X	ACT	IVE	231-791-2	ı	-
Sodium lauryl sulfate	151-21-3	X	-	Х	ACT	ACTIVE		-	-
	•								
Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS

	Water	7732-18-5	X	KE-35400	X	-	X	X	X	X
ı	Sodium lauryl sulfate	151-21-3	Х	KE-21884	Х	Х	X	Х	Х	Х

#### Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## **Other International Regulations**

#### Authorisation/Restrictions according to EU REACH

#### 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)
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
Sodium lauryl sulfate	151-21-3	Listed	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)		
		Qualifying Quantities Qualifying Quantities					
		for Major Accident	for Safety Report				
		Notification	Requirements				
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable		
Sodium lauryl sulfate	151-21-3	Not applicable	Not applicable	Not applicable	Not applicable		

# 16. Other information

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Revision Summary This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

## 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**