

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
Product Identifier

Nama Produk **LARUTAN SDS 20%**
Product Description: **Sodium dodecyl sulfate, 20% solution**
Cat No. : BP1311-1; BP1311-200
Synonyms Sodium lauryl sulfate.

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Fisher Scientific (M) Sdn Bhd No. 3, Jalan Sepadu 25/123,
 Taman Perindustrian Axis, Seksyen 25,
 40400 Shah Alam, Selangor Darul Ehsan, Malaysia.

Supplier .
E-mail address Enquiry.my@thermofisher.com

Emergency Telephone Number
 (603) 5122 8888

SECTION 2: HAZARDS IDENTIFICATION
Classification of the substance or mixture

Skin Corrosion/Irritation	Category 2 (H315)
Serious Eye Damage/Eye Irritation	Category 1 (H318)

Label Elements


Signal Word **Danger**

Hazard Statements

H315 - Causes skin irritation
 H318 - Causes serious eye damage

Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P332 + P313 - If skin irritation occurs: Get medical advice/attention
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

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easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician

Other Hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

SECTION 4: FIRST AID MEASURES

Description of 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.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Inhalation

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

Self-Protection of the First Aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Causes severe eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

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

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

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

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Advice for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Use personal protective equipment as required.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Conditions for Safe Storage, Including any Incompatibilities

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

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Controls

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

Protective gloves

Skin and body protection

Long sleeved clothing

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Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, 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.

Remove gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Recommended Filter type:

Particulates filter conforming to EN 143

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, Colourless
Physical State	Liquid
Odor	No information available
Odor Threshold	No data available
pH	No information available

Melting Point/Range	No data available	
Softening Point	No data available	
Boiling Point/Range	> 100 °C / > 212 °F	@ 760 mmHg
Flash Point	Not applicable	Method - No information available

Evaporation Rate	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available	

Vapor Pressure	No data available	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	1.01	
Bulk Density	Not applicable	Liquid
Water Solubility	Soluble	
Solubility in other solvents	No information available	

Partition Coefficient (n-octanol/water)

Component	log Pow
Sodium lauryl sulfate	1.6

Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

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Explosive Properties No information available
Oxidizing Properties No information available

Molecular Weight 288.38

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing.

Conditions to Avoid

Excess heat. Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

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

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

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

Chronic Toxicity **Carcinogenicity**

There are no known carcinogenic chemicals in this product

Sensitization
Mutagenic Effects
Reproductive Effects

No information available
No information available
No information available

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Developmental Effects No information available
Target Organs No information available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects Contains a substance which is: Harmful to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Sodium lauryl sulfate	LC50: = 1.31 mg/L, 96h semi-static (Cyprinus carpio) LC50: 10.8 - 16.6 mg/L, 96h static (Poecilia reticulata) LC50: 15 - 18.9 mg/L, 96h static (Pimephales promelas) LC50: 8 - 12.5 mg/L, 96h static (Pimephales promelas) LC50: 22.1 - 22.8 mg/L, 96h static (Pimephales promelas) LC50: 4.3 - 8.5 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 4.62 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 4.2 mg/L, 96h (Oncorhynchus mykiss) LC50: = 7.97 mg/L, 96h flow-through (Brachydanio rerio) LC50: 9.9 - 20.1 mg/L, 96h semi-static (Brachydanio rerio) LC50: 4.06 - 5.75 mg/L, 96h static (Lepomis macrochirus) LC50: 13.5 - 18.3 mg/L, 96h semi-static (Poecilia reticulata) LC50: 6.2 - 9.6 mg/L, 96h (Pimephales promelas) LC50: 10.2 - 22.5 mg/L, 96h semi-static (Pimephales promelas) LC50: 5.8 - 7.5 mg/L, 96h static (Pimephales promelas) LC50: = 4.5 mg/L, 96h (Lepomis macrochirus) LC50: 4.2 - 4.8 mg/L, 96h flow-through (Lepomis macrochirus)	EC50: = 1.8 mg/L, 48h (Daphnia magna)	EC50: = 53 mg/L, 72h (Desmodesmus subspicatus) EC50: 30 - 100 mg/L, 96h (Desmodesmus subspicatus) EC50: = 117 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: 3.59 - 15.6 mg/L, 96h static (Pseudokirchneriella subcapitata)	

Persistence and degradability

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**Persistence
Degradation in sewage
treatment plant**

Soluble in water, Persistence is unlikely, based on information available.
Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Bioaccumulative potential

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Sodium lauryl sulfate	1.6	No data available

Mobility in soil

The product is water soluble, and may spread in water systems. . Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Products

Waste is classified as hazardous Dispose of in accordance with the European Directives on waste and hazardous waste Dispose of in accordance with local regulations

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

Other Information

Do not dispose of waste into sewer Waste codes should be assigned by the user based on the application for which the product was used Do not empty into drains

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

Road and Rail Transport

Not regulated

IATA

Not regulated

Special Precautions for User

No special precautions required

SECTION 15: REGULATORY INFORMATION

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

International Inventories

X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Sodium lauryl sulfate	205-788-1	-		X	X	-	X	X	X	X	KE-21884
Water	231-791-2	-		X	X	-	X	X	X	X	KE-35400

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Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance
This product does not contain any known or suspected substance

SECTION 16: OTHER INFORMATION

Legend

CAS - Chemical Abstracts Service

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

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

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

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC (volatile organic compound)

Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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Revision Summary

Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Disclaimer

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End of Safety Data Sheet