

SAFETY DATA SHEET

New Zealand

Section 1. Identification

Product name

SDS, 100 g

Catalogue Number

US75819-100G



Chemical name

Sodium Dodecyl Sulphate

Other means of identification

Sulfuric acid, monododecyl ester, sodium salt; Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate, >26 - 33% in a non hazardous diluent; Dodecyl sodium sulphate, >33% in a non hazardous diluent; Dodecyl sodium sulphate, >2 - 4% in a non hazardous diluent; Dodecyl sodium sulphate; sodium lauryl sulphate; Dodecyl hydrogen sulfate

Product type

Powder.

Identified uses

Analytical chemistry. Laboratory chemicals Research and Development

Supplier

GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+44 0870 606 1921

GE Healthcare Bio-Sciences
8 Tangihua Street
Auckland 1010

Person who prepared the MSDS :

msdslifesciences@ge.com

Emergency telephone number (with hours of operation)

0800 733 893
(10am - 7pm)

Section 2. Hazards identification

HSNO Classification

6.1 - ACUTE TOXICITY: ORAL - Category D
6.1 - ACUTE TOXICITY: SKIN - Category C
6.3 - SKIN IRRITATION - Category B
6.4 - EYE IRRITATION - Category A (Irritant)
9.1 - AQUATIC ECOTOXICITY - Category D
9.2 - SOIL ECOTOXICITY - Category D
9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY - Category C

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

GHS label elements

Signal word

Danger

Hazard statements

Toxic in contact with skin.
Harmful if swallowed.
Causes mild skin irritation.
Causes serious eye irritation.
Harmful to aquatic life.
Harmful to the soil environment.
Harmful to terrestrial vertebrates.

Precautionary statements

Prevention

Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.



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Response	IF SWALLOWED: Rinse mouth. IF ON SKIN: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash hands after handling. Call a POISON CENTER or doctor/physician if you feel unwell.
Storage	Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Symbol	



Other hazards which do not result in classification Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture	Substance
Chemical name	Sodium Dodecyl Sulphate
Other means of identification	Sulfuric acid, monododecyl ester, sodium salt; Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate, >26 - 33% in a non hazardous diluent; Dodecyl sodium sulphate, >33% in a non hazardous diluent; Dodecyl sodium sulphate, >2 - 4% in a non hazardous diluent; Dodecyl sodium sulphate; sodium lauryl sulphate; Dodecyl hydrogen sulfate

CAS number/other identifiers

CAS number	151-21-3
EC number	205-788-1
Product code	US75819-100G

Ingredient name	%	CAS number
Sodium Dodecyl Sulphate	100	151-21-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Ingestion	Harmful if swallowed. Irritating to mouth, throat and stomach.



Skin contact	Toxic in contact with skin. Causes mild skin irritation.
Eye contact	Causes serious eye irritation.
<u>Over-exposure signs/symptoms</u>	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	No specific data.
Skin	Adverse symptoms may include the following: irritation redness
Eyes	Adverse symptoms may include the following: pain or irritation watering redness
<u>Indication of immediate medical attention and special treatment needed, if necessary</u>	
Specific treatments	Not available.
Notes to physician	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable	Use dry chemical powder.
Not suitable	Do not use water jet.
Specific hazards arising from the chemical	Fine dust clouds may form explosive mixtures with air. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides
Hazchem code	Not available.
Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
Large spill	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.



Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid release to the environment. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

Appearance

Physical state	Solid. [Flakes. Powder.]
Color	White to yellowish.
Odor	Faint odor.
Odor threshold	Not available.
pH	6.5 to 8.5 [Conc. (% w/w): 1%]
Melting point	204 to 207°C (399.2 to 404.6°F)
Boiling point	Not available.
Flash point	Open cup: >100°C (>212°F) [Product does not sustain combustion.]
Burning rate	Not available.



Burning time	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Non-flammable but will burn on prolonged exposure to flame or high temperature.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility	Partially soluble in the following materials: cold water, hot water and methanol. Very slightly soluble in the following materials: acetone. Insoluble in the following materials: diethyl ether.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	380°C (716°F)
SADT	Not available.
Viscosity	Not available.
<u>Aerosol product</u>	
Type of aerosol	Not applicable.
Heat of combustion	Not available.
Ignition distance	Not applicable.
Enclosed space ignition - Time equivalent	Not applicable.
Enclosed space ignition - Deflagration density	Not applicable.
Flame height	Not applicable.
Flame duration	Not applicable.

Section 10. Stability and reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Ingestion	Harmful if swallowed. Irritating to mouth, throat and stomach.
Skin contact	Toxic in contact with skin. Causes mild skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	No specific data.
Skin contact	Adverse symptoms may include the following: irritation redness



Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
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Delayed and immediate effects and also chronic effects from short and long term exposure**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Dodecyl Sulphate	LD50 Oral	Rat	1288 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sodium Dodecyl Sulphate	Eyes - Mild irritant	Rabbit	-	-	-
	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Dog	-	-	-
	Skin - Mild irritant	Guinea pig	-	-	-
	Skin - Mild irritant	Human	-	-	-
	Skin - Moderate irritant	Human	-	-	-
	Skin - Moderate irritant	Mouse	-	-	-
	Skin - Mild irritant	Pig	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	-	-

Sensitization

Not available.

Potential chronic health effects

General	No known significant effects or critical hazards.
Inhalation	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Chronic toxicity

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity

Not available.

Aspiration hazard

Not available.

Numerical measures of toxicity**Acute toxicity estimates**

Not available.

Section 12. Ecological information

Ecotoxicity Readily biodegradable This material is harmful to aquatic life.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Sodium Dodecyl Sulphate	Acute LC50 1500 ug/L Marine water	Crustaceans - Artemia sp.	48 hours
	Acute LC50 1.26 mg/L Fresh water	Daphnia - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 590 ug/L Fresh water	Fish - Cirrhinus mrigala - LARVAE - 2 days - 4.5 mm - 51 mg	96 hours

Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Sodium Dodecyl Sulphate	-	>60%; 28 day(s)	Readily

Bioaccumulative potential

Not available.

Mobility in soil









Soil/water partition coefficient (K_{oc}) Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*
New Zealand Class	UN1325	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate). Marine pollutant (Sodium Dodecyl Sulphate)	4.1	III
		 		
ADG Class	UN1325	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	4.1	III
		 		
UN Class	UN1325	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	4.1	III
		 		
ADR/RID Class	UN1325	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	4.1	III
		  Tunnel code (E)		
IATA Class	UN1325	Flammable solid, organic, n.o.s. (sodium dodecyl sulphate)	4.1	III



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IMDG Class	UN1325	Flammable solid, organic, n.o.s. (sodium dodecyl sulphate). Marine pollutant (sodium dodecyl sulphate)	4.1	III
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PG* : Packing group

Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC) This material is listed or exempted.

HSNO Approval Number	HSR003122
HSNO Group Standard	Not available.
HSNO Classification	6.1 - ACUTE TOXICITY: ORAL - Category D 6.1 - ACUTE TOXICITY: SKIN - Category C 6.3 - SKIN IRRITATION - Category B 6.4 - EYE IRRITATION - Category A (Irritant) 9.1 - AQUATIC ECOTOXICITY - Category D 9.2 - SOIL ECOTOXICITY - Category D 9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY - Category C

Australia inventory (AICS) This material is listed or exempted.

Safety, health and environmental regulations specific for the product No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

History

Date of printing	4/5/2011.
Date of issue/ Date of revision	05 April 2011
Date of previous issue	No previous validation.
Version	0.9
Key to abbreviations	ADN/ADNR = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations

References Not available.

 Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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