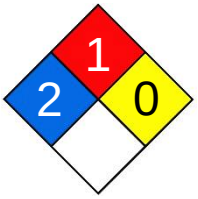
Material Safety Data Sheets



Revision 2

1. IDENTIFICATION

Product Name	**Sodium Lauryl Sulphate**
Other Names	**Dodecyl Hydrogen Sulfate; Dodecyl sodium sulphate; Lauryl Sodium Sulfate; Sodium Dodecyl Sulfate; Sodium Lauryl Sulfate; SULPHURIC ACID, MONODODECYL ESTER, SODIUM SALT**
Code No	**200-SLS-2**
Uses	**No Data Available**
Chemical Family	**No Data Available**
Chemical Formula	**$C_{12}H_{25}O_4S.Na$**
Chemical Name	**Sodium Lauryl Sulphate**
Product Description	**No Data Available**
Company	**Arman sina.co**
Contact Information	**info@armansina.com** **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories	**Corrosive** **irritation**
Risk Phrases	**Harmful if swallowed.** **Irritating to skin.** **Risk of serious eye damage.** **Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.**
Safety Phrases	**Do not breathe dust.** **Avoid contact with skin and eyes.** **In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.** **Wear eye/face protection.**
Symbol	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Lauryl Sulphate	$C_{12}H_{25}O_4S.Na$	151-21-3	100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	**Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If vomiting occurs, lean patient forward to prevent aspiration into the lungs. Seek medical attention.**
Eye	**Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.** **Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.**
Skin	**Remove contaminated clothing. Wash affected area with plenty of soap and water for at least 15 minutes. Seek immediate medical attention. Wash clothing before reuse.**
Inhaled	**Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.**
Advice to Doctor	**Treat symptomatically based on judgement of doctor and individual reactions of patient.**
Medical Conditions Aggravated by Exposure	**No information available on medical conditions which are aggravated from exposure to this product. However, harmful if swallowed.**

5. FIRE FIGHTING MEASURES

General Measures	**If safe to do so, move undamaged containers from fire area. Dam fire control water for later disposal. Avoid generating dust.**
Flammability Conditions	**Product is a non-flammable solid.**
Extinguishing Media	**In case of fire, appropriate extinguishing media include powder, water spray.**
Fire and Explosion Hazard	**This material may cause risk of dust explosion.**
Hazardous Products of Combustion	**This product may produce toxic gas when heated above decomposition. Risk of producing harmful gases such as carbon monoxide and sulfur oxides. Avoid inhalation of smoke or gases.**
Special Fire Fighting Instructions	**Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.**
Personal Protective Equipment	**Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit.**
Flash Point	**No Data Available**
Lower Explosion Limit	**No Data Available**
Upper Explosion Limit	**No Data Available**
Auto Ignition Temperature	**No Data Available**
Hazchem Code	**No Data Available**

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	**Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing as listed in section 8. Risk of slipping. Spilled material forms slippery floor.**
Clean Up Procedures	**Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner (dust-explosion-proof type). Transfer to a suitable, labelled container and dispose of promptly as hazardous waste.**
Containment	**Stop leak if safe to do so.**
Environmental Precautionary Measures	**Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority.**
Evacuation Criteria	**Evacuate all unnecessary personnel.**

7. HANDLING AND STORAGE

Handling	**Observe good personal hygiene practices and recommended procedures. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Avoid contact with eyes and skin. Avoid inhalation of fine dust. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. This material may cause risk of dust explosion. Take precautionary measures against static discharges by bonding and grounding equipment. Remove contaminated clothing and wash before reuse.**
Storage	**Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.**
Container	**Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer.**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	**No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).** **NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.** **These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.**
Exposure Limits	**No Data Available**
Biological Limits	**No information available on biological limit values for this product.**
Engineering Measures	**A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.**
Personal Protection Equipment	**RESPIRATOR: Wear an effective dust mask where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716).** **EYES: Safety glasses with side shield (Safety goggles or Face shield) (AS1336/1337).** **HANDS: Wear rubber gloves (AS2161).** **CLOTHING: Long-sleeved protective clothing (full-body suit) and safety footwear (AS3765/2210).**
Work Hygienic Practices	**No Data Available**

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	**Solid**
Appearance	**Crystalline or powder / Needles / Granules**
Odour	**Slightly Characteristic Odour**
Colour	**White to light yellow**
pH	**7 1% Solution**
Vapour Pressure	**No Data Available**
Relative Vapour Density	**No Data Available**
Boiling Point	**No Data Available**
Melting Point	**204-207ºC**
Freezing Point	**No Data Available**
Solubility	**No Data Available**
Specific Gravity	**No Data Available**
Flash Point	**No Data Available**
Auto Ignition Temp	**No Data Available**
Evaporation Rate	**No Data Available**
Bulk Density	**No Data Available**
Corrosion Rate	**No Data Available**

Decomposition Temperature	**No Data Available**
Density	**0.54 g/mL**
Specific Heat	**No Data Available**
Molecular Weight	**No Data Available**
Net Propellant Weight	**No Data Available**
Octanol Water Coefficient	**No Data Available**
Particle Size	**No Data Available**
Partition Coefficient	**No Data Available**
Saturated Vapour Concentration	**No Data Available**
Vapour Temperature	**No Data Available**
Viscosity	**No Data Available**
Volatile Percent	**No Data Available**
VOC Volume	**No Data Available**
Additional Characteristics	**SOLVENT SOLUBILITY: Insoluble in isopropanol, xylene and ethyleneglycol.**
Potential for Dust Explosion	**This product may cause a risk of dust explosion.**
Fast or Intensely Burning Characteristics	**No Data Available**
Flame Propagation or Burning Rate of Solid Materials	**No Data Available**
Non-Flammables That Could Contribute Unusual Hazards to a Fire	**No Data Available**
Properties That May Initiate or Contribute to Fire Intensity	**No Data Available**
Reactions That Release Gases or Vapours	**No Data Available**
Release of Invisible Flammable Vapours and Gases	**No Data Available**

10. STABILITY AND REACTIVITY

Chemical Stability	**Product is stable under normal conditions of use, storage and temperature.**
Conditions to Avoid	**Avoid generating dust. This material may cause risk of dust explosion.**
Materials to Avoid	**No Data Available**
Hazardous Decomposition Products	**This products may produce toxic gas when heated above decomposition. When involved in a fire, this product may produce toxic gases such as carbon monoxide and sulphur oxides. Avoid inhalation of smoke or gases.**
Hazardous Polymerisation	**No Data Available**

11. TOXICOLOGICAL INFORMATION

General Information

Oral LD50 Rat: 977mg/Kg bw (6.1D - EPA)
LD50 Rat: 1200 mg/kg (Data on sodium dodecyl sulfate)(8)
Guinea pig, LD50>1200 mg/kg (Data on sodium dodecyl sulfate)(8)
Dermal LD50 Rabbit: 580 mg/kg bw (6.1C - EPA)

SKIN CORROSION / IRRITATION:
Rabbit, 4 hour patch test, 25%: Strong erythema and edema (Data on sodium dodecyl sulfate)(48)

SERIOUS EYE DAMAGE / IRRITATION:
Rabbit, Draize test, 20%: Strongly irritating (Data on sodium dodecyl sulfate)(48)

SKIN SENSITIZATION: Guinea pig, Buehler Test: Negative (Data on sodium dodecyl sulfate)(48)

MUTAGENICITY (GERM CELL MUTAGENICITY):
Ames test (TA98, TA100, WP2try-): Negative
Rec-assay (H17, M45): Negative.

CARCINOGENICITY:
AS (Alcohol Sulphates) are not carcinogenic (48)

EyeIrritant	Risk of serious damage to eyes.
Ingestion	Harmful if swallowed.
SkinIrritant	Irritating to skin.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	Data on sodium dodecyl sulphate(3): Brachydanio rerio, 96h LC50: 7.97 mg/L Daphnia magna, 48h EC50: 4.6 mg/L Scenedesmus subspicatus, 72h EC50: 53 mg/L
Persistence/Degradability	OECD301: Readily biodegradable (8) BOD5: 1.3 g/g (JIS K0102) (Data on similar product) COD(Cr): 1.7 g/g (JIS K0102) (Data on similar product)
Mobility	No information available on mobility for this product.
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential	No information available on bioaccumulation for this product.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with all local regulations. All empty packaging should be disposed of in accordance with Local Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Dodecyl sodium sulphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	Dodecyl sodium sulphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport
IATA

Proper Shipping Name	**Dodecyl sodium sulphate**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**

15. OTHER INFORMATION

Revision	**2**
Key/Legend	**< Less Than**
	> Greater Than
	atm Atmosphere
	CAS Chemical Abstracts Service (Registry Number)
	cm Square Centimetres
	CO2 Carbon Dioxide
	COD Chemical Oxygen Demand
	Degrees Celsius
	Degrees Fahrenheit
	g Grams
	g/cm Grams per Cubic Centimetre
	g/l Grams per Litre
	HSNO Hazardous Substance and New Organism
	IDLH Immediately Dangerous to Life and Health
	immiscible Liquids are insoluable in each other.
	inHg Inch of Mercury
	inH2O Inch of Water
	K Kelvin
	kg Kilogram
	kg/m Kilograms per Cubic Metre
	lb Pound
	LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
	LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
	ltr or L Litre
	m Cubic Metre
	mbar Millibar
	mg Milligram
	mg/24H Milligrams per 24 Hours
	mg/kg Milligrams per Kilogram
	mg/m Milligrams per Cubic Metre
	Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
	mm Millimetre
	mmH2O Millimetres of Water
	mPa.s Millipascals per Second
	N/A Not Applicable
	NIOSH National Institute for Occupational Safety and Health
	NOHSC National Occupational Heath and Safety Commission
	OECD Organisation for Economic Co-operation and Development
	Oz Ounce
	PEL Permissible Exposure Limit
	Pa Pascal
	ppb Parts per Billion
	ppm Parts per Million
	ppm/2h Parts per Million per 2 Hours
	ppm/6h Parts per Million per 6 Hours
	psi Pounds per Square Inch
	R Rankine
	RCP Reciprocal Calculation Procedure
	STEL Short Term Exposure Limit
	TLV Threshold Limit Value
	tne Tonne
	TWA Time Weighted Average
	ug/24H Micrograms per 24 Hours
	UN United Nations
	wt Weight