

MATERIAL SAFETY DATA SHEET

SODIUM DODECYL SULPHATE REAGENT

1. Product and Company Information

Product Name: SODIUM DODECYL SULPHATE REAGENT
Product Number A12-9193, A12-9194, A09-2026
Manufacturer: Medicago AB
Danmark Berga
755 98 Uppsala
Sweden
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Emergency Phone: 112 (Sweden)

2. Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Harmful in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

3. Composition/Information on Ingredients

Product Name	CAS #	EC #	Annex I Index Number
SODIUM DODECYL SULPHATE	None	None	None
Formula	C12H25O4S - NADS		
Molecular Weight	288.38 AMU		
Synonyms	A13-00356 * Akyposal SDS * Aquarex ME * Aquarex methyl * Avirol 101 * Avirol 118 conc * Berol 452 * Carsonal SLS * Carsonol SLS Paste B * Carsonol SLS Special * Conco sulphate WA * Conco Sulfate WA-1200 * Conco Sulfate WA-1245 * Conco Sulfate WAG * Conco Sulfate WAN * Conco Sulfate WAS * Conco Sulfate WN * CP 75424 * Cycloryl 21 * Cycloryl 31 * Cycloryl 580 * Cycloryl 585N * Dehydag sulfate GL emulsion * Dehydag sulphate GL emulsion * Detergent 66 * Dodecyl alcohol * hydrogen sulphate * sodium salt * Dodecyl sodium sulphate * Dodecyl sulphate sodium * n-Dodecyl sulphate sodium * Dodecyl sulphate, sodium salt * Dreft * Duponal * Duponal WAQE * Duponol * Duponol C * Duponol ME * Duponol methyl * Duponol QX * Duponol WA * Duponol WA Dry * Duponol WAQ * Duponol WAQA * Duponol WAQE * Duponol WAQM * EMAL O * EMAL 10 * Emersal 6400 * Empicol LPZ * Empicol LS 30 * Empicol LX 28 * Emulsifier No. 104 * Finasol osr (sub 2) * Gardinol * Hexamol SLS * Incronol SLS * Irium * Jordanol SL-300 * Lanette wax-S * Laurylsiran sodny (Czech) * Lauryl sodium sulphate * Lauryl		

4. First-Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing becomes difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

6. Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Evacuate area.

PROCEDURE (S) OF PERSONAL PRECAUTION (S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS:

Hygroscopic

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Hand Protection: Compatible chemical-resistant gloves. Eye Protection: Chemical safety goggles.

9. Physical and Chemical Properties

Appearance	Physical state: Powder	
Property	Value	At Temperature or Pressure
pH	7.2	
Molecular Weight	N/A	
BP/BP Range	N/A	
MP/MP Range		204.0 – 207.0 °C
Flash Point	N/A	
Freezing Point	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	0.37 g/cm ³	
Partition Coefficient	N/A	
Viscosity	N/A	

Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Miscellaneous	N/A
Solubility	Solubility in Water: Soluble. clear, colorless
Solvent: Insoluble.	Other Solvents: ISP, ALC, XXLE

10. Stability and Reactivity

STABILITY

Stable

Conditions to Avoid: Moisture

Materials to Avoid: Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, Carbon dioxide, Sulfur oxides.

HAZARDOUS POLYMERIZATION

Will not occur

11. Toxicological Information

RTECS NUMBER: WT1050000

ACUTE TOXICITY

LD50

Skin

Rat

2,000 mg/kg

100% MORTALITY

LD50

Skin

Rabbit

580 mg/kg

LD50

Skin

Guinea Pig

> 1,200 mg/kg

LD50

Oral

Rat

1288 mg/kg

LC50

Inhalation

Rat

> 3,900 mg/m³

1 H

LD50
Intraperitoneal

Rat
210 MG/KG

LD50
Intravenous

Rat
118 mg/kg

LD50
Intraperitoneal

Mouse
250 MG/KG
Remarks: Behavioral: Change in motor activity (specific assay).
Behavioral: Somnolence (general depressed activity).
Vascular: Regional or general arteriolar or venous dilation.

LD50
Intravenous
Mouse

118 MG/KG

IRRITATION DATA

Skin
Human

250 mg
24H
Remarks: Mild irritation effect

Skin

Human
25 mg
24H
Remarks: Mild irritation effect

Skin

Mouse
25 mg
24H
Remarks: Moderate irritation effect

Skin

Dog
25 mg
24H
Remarks: Mild irritation effect

Skin

Rabbit
50 mg
24H
Remarks: Severe irritation effect

Skin

Rabbit

25 mg

24H

Remarks: Moderate irritation effect

Skin

Rabbit

250 mg

24H

Remarks: Moderate irritation effect

Skin

Rabbit

10 mg

24H

Skin

Rabbit

50 mg

24H

Remarks: Mild irritation effect

Eyes

Rabbit

100 mg

24H

Remarks: Moderate irritation effect

Eyes

Rabbit

0.25 mg

Remarks: Mild irritation effect

Eyes

Rabbit

2 mg

Eyes

Rabbit

10 mg

Remarks: Moderate irritation effect

Skin

Pig

25 mg

24H

Remarks: Mild irritation effect

Skin

Guinea Pig

25 mg

24H

Remarks: Mild irritation effect

SENSITIZATION

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

SIGNS AND SYMPTOMS OF EXPOSURE

The sodium salt of dodecyl sulphate has been reported to cause pulmonary sensitization resulting in hyperactive airway

dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of non-specific environmental stimuli such as automobile exhaust, perfumes, and passive smoking. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: Harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION

Lungs.

CONDITIONS AGGRAVATED BY EXPOSURE

Causes sneezing. Do not inhale.

CHRONIC EXPOSURE-MUTAGEN

Human

100 MG/L

Cell Type: lymphocyte

DNA inhibition

Rat

243 UMOL/L

Cell Type: liver

DNA damage

Guinea pig

60 UMOL/L

Cell Type: kidney

DNA inhibition

CHRONIC EXPOSURE – TERATOGEN

Species: Mouse

Dose: 480 MG/KG

Route of Application: Skin

Exposure Time: (6-13D PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

12. Ecological Information

N/A

ECOTOXICOLOGICAL EFFECTS

Test Type: LC50 Fish

Species: Onchorhynchus mykiss (Rainbow trout)

Time: 96 h

Value: 3.6 mg/l

ADDITIONAL ECOLOGICAL INFORMATION

BOD: 95.9 %

COD: 95.1 %

13. Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14. Transport Information

RID/ADR

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

IMDG

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

Marine Pollutant: No

Severe Marine Pollutant: No

Technical Name: Required

IATA

UN#: 2811

Class: 6.1

PG: III

Proper Shipping Name: Toxic solid, organic, n.o.s.

Inhalation Packing Group I: No

Technical name: Required

15. Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 21/22-36/37/38

Harmful in contact with skin and if swallowed. Irritating to eyes, respiratory system, and skin.

S-PHRASES: 26-36/37

In case of contact with eyes, wash immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2

ID-Number: 664

KBwS - Decision

16. Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Medicago AB, Sweden shall not be held liable for any damage resulting from handling or from contact with the above product.

DISCLAIMER

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