



# Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

Trade name/designation:	Sodium dodecyl sulfate
Product No.:	ML4509
Synonymes:	no data available
CAS No.:	151-21-3
Other means of identification:	

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

Recommended Use:	For Further Manufacturing Use Only
Uses advised against:	Not for Human or Animal Drug Use

### Details of the supplier of the safety data sheet

*United States of America*

### Supplier

#### **VWR International LLC**

Street	100 Matsonford Road Radnor Corporate Center, Building One, Suite 200 P. O. Box 6660
Postal code/city	Radnor, PA 19087
Telephone	+1-800-932-5000 toll-free within US/CA +1-610-386-1700
Telefax	+1-610-728-2103



## Manufacturer

### VWR Chemicals, LLC

Street

6351 Inducon Drive East

Postal code/city

Sanborn, NY 14132

### Emergency telephone

Telephone

+1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA)

### Preparation Information

VWR International - Data Compliance

E-mail

sds@vwr.com

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

Hazard classes and hazard categories	Hazard statements
Flammable solid, category 2	H228
Acute toxicity, category 3, dermal	H311
Acute toxicity, category 4, oral	H302
Serious eye damage, category 1	H318
Skin irritation, category 2	H315
Specific target organ toxicity (single exposure), category 3, vascular	H335
Hazardous to the aquatic environment, chronic, category 3	H412

### 2.2 Label elements

#### Labelling in accordance with 29 CFR 1910.1200 (OSHA HCS)

#### Hazard pictograms



Signal word: Danger

Hazard statements	
H228	Flammable solid.
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.



Precautionary statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P310	IF exposed or concerned: Immediately call a POISON CENTER/doctor.

Other hazards

**Hazards not otherwise classified (HNOC)**

no data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Substance name	Sodium dodecyl sulphate (SDS)
Molecular formula	C12H25NaO4S
Molecular weight	288.38 g/mol
CAS No.	151-21-3

## SECTION 4: First aid measures

### 4.1 General information

IF exposed: Immediately call a POISON CENTER/doctor. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Immediately call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

#### In case of ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.



#### 4.2 Most important symptoms/effects, acute and delayed

no data available

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

#### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

#### 4.5 Information to physician

no data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray  
ABC-powder  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen

##### Extinguishing media which must not be used for safety reasons

no restriction

#### 5.2 Specific hazards arising from the chemical

In case of fire may be liberated:  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Sulphur oxides

#### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

#### 5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray/stream to protect personnel and to cool endangered containers.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.



## 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact Keep away from sources of ignition. - No smoking. Usual measures for fire prevention. Take precautionary measures against static discharges. Protect from moisture.

### 7.2 Conditions for safe storage, including any incompatibilities

storage temperature: Ambient temperature

Storage class: 4.1B

Keep container tightly closed in a cool, well-ventilated place. Keep/Store away from combustible materials.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Engineering controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

#### *Eye/face protection*

Eye glasses with side protection

#### *Skin protection*

When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Recommended glove articles

#### By short-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time (maximum wearing time):	> 480 min

#### By long-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,38 mm
Breakthrough time (maximum wearing time):	> 480 min

#### *Respiratory protection*

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

#### Environmental exposure controls

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	solid
Color:	white
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	6-9 (10 g/l; H <sub>2</sub> O; 20 °C)
(e) Melting point/freezing point:	204-207 °C
(f) Initial boiling point and boiling range:	no data available
(g) Flash point:	> 100 °C
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	Flammable solid.
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	no data available
(l) Vapour density:	no data available
(m) Relative density:	1.1 g/cm <sup>3</sup> (20 °C)
(n) Solubility(ies)	
Water solubility (g/L):	~150 g/l (20 °C)
Soluble (g/L) in Ethanol:	no data available
(o) Partition coefficient: n-octanol/water:	1.6 (20 °C)
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	no data available
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable

### 9.2 Other information

Bulk density:	1.1 g/cm <sup>3</sup> (20 °C)
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry constant:	no data available



## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

### 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*

LD50: > 1427 mg/kg - Rat - (OECD 401)

*Acute dermal toxicity:*

LD50: 580 mg/kg - Rabbit - (IUCLID)

*Acute inhalation toxicity:*

LC50: > 3900 mg/m<sup>3</sup> - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

#### Irritant and corrosive effects

*Primary irritation to the skin:*

Causes skin irritation.

*Irritation to eyes:*

Causes serious eye damage.

*Irritation to respiratory tract:*

May cause respiratory irritation.



**Respiratory or skin sensitization**

In case of skin contact: not sensitising  
After inhalation: not sensitising

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

not applicable

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

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

no data available	ACGIH	IARC	NTP	OSHA

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

**SECTION 12: Ecological information**

**12.1 Ecotoxicity**

**Fish toxicity:**

LC50: 7.97 mg/l (96 h) - Fogels, A., and J.B. Sprague 1977. Comparative Short-Term Tolerance of Zebrafish, Flagfish, and Rainbow Trout to Five Poisons Including Potential Reference Toxicants. Water Res. 11(9):811-817

**Daphnia toxicity:**

EC50: 9.8 mg/l (48 h) - Rossini, G.D.B., and A.E. Ronco 1996. Acute Toxicity Bioassay Using Daphnia obtusa as a Test Organism. Environ.Toxicol.Water Qual. 11(3):255-258

LC50: 12.1 mg/l (48 h) - Lewis, P.A., and W.B. Horning II 1991. Differences in Acute Toxicity Test Results of Three Reference Toxicants on Daphnia at Two Temperatures. Environ.Toxicol.Chem. 10:1351-1357





**Algae toxicity:**

EC50: 15 mg/l (72 h) - Peterson, S.M., and J.L. Stauber 1996. new Algal Enzyme Bio assay for the Rapid Assessment of Aquatic Toxicity. Bull.Environ.Toxicol.Chem. 56(5):750-757

**Bacteria toxicity:**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water: 1.6 (20 °C)

**12.4 Mobility in soil:**

no data available

**12.5 Results of PBT/vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Appropriate disposal / Product**

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: 160508

**Appropriate disposal / Package**

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

**Additional information**

no data available

**SECTION 14: Transport information**

**Land transport (DOT)**

UN-No.:	1325
Proper Shipping Name:	FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)
Class(es):	4.1
Classification code:	F1
Hazard label(s):	4.1
Packing group:	II
Environmental hazards:	No
Marine pollutant:	No

Special precautions for user:

### Sea transport (IMDG)

UN-No.:	1325
Proper Shipping Name:	FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)
Class(es):	4.1
Classification code:	
Hazard label(s):	4.1
Packing group:	II
Environmental hazards:	No
MARINE POLLUTANT:	no data available
Special precautions for user:	
Segregation group:	-
EmS-No.	F-A S-G
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
not relevant	



## Air transport (ICAO-TI / IATA-DGR)

UN-No.:	1325
Proper Shipping Name:	FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)
Class(es):	4.1
Classification code:	
Hazard label(s):	4.1
Packing group:	II
Special precautions for user:	

## SECTION 15: Regulatory information

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

#### SARA 313 Components

no data available

#### no data available

no data available

#### Pennsylvania Right To Know Components

no data available

#### New Jersey Right To Know Components

no data available

#### California Prop. 65 Components

no data available

## SECTION 16: Other information

### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
 DOT - Department of Transportation  
 IARC - International Agency for Research on Cancer  
 IATA-DGR - International Air Transport Association-Dangerous Goods Regulations  
 ICAO-TI - International Civil Aviation Organization-Technical Instructions  
 IMDG - International Maritime Code for Dangerous Goods  
 LTV - Long Term Value  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety & Health Administration  
 PBT - Persistent, Bioaccumulative and Toxic  
 PEL - Permissible Exposure Limit  
 STV - Short Term Value  
 SVHC - Substances of Very High Concern  
 TLV - Threshold Limit Value



vPvB - very Persistent, very Bioaccumulative

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

AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)

Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)

RID - Regulation concerning the International Carriage of Dangerous Goods by Rail

**Additional information**

Indication of changes:                      general update

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state 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. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.*