

# Safety Data Sheet

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

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## SECTION 1: Identification

### Product identifier

Trade name/designation:	Sodium dodecyl sulfate (SDS) Bioreagent Grade Material meets the analytical specifications of Sodium dodecyl sulfate for the following: BIOTECHNOLOGY.
Product No.:	BRGT227
Synonymes:	none/none
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

#### 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/Canada +1-610-386-1700
Telefax:	+1-610-728-2103

### Emergency phone number

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

### Preparation Information

VWR International - Product Information Compliance

E-mail sds@vwr.com

## SECTION 2: Hazard 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 4, oral and inhalation	H302+H332
Skin irritation, category 2	H315
Serious eye damage, category 1	H318
Specific target organ toxicity (single exposure), category 3, vascular	H335

### 2.2 Label elements

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

#### Hazard pictograms



Signal word: Danger

Hazard statements	
H228	Flammable solid.
H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

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.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.

#### Hazards not otherwise classified (HNOC)

none/none

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Substance name	Sodium dodecyl sulphate (SDS)
Molecular formula	C <sub>12</sub> H <sub>25</sub> NaO <sub>4</sub> S
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.

#### In case of 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: Fire fighting 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 monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Sulphur oxides

#### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.  
Protective equipment and precautions for firefighters  
Wear a self-contained breathing apparatus and chemical protective clothing.

##### 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.  
In case of fire: Evacuate area.

### SECTION 6: Accidental release measures

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

Avoid dust formation.

#### 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 articles and floor according to the environmental legislation. 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

Recommended storage temperature: Store between 15 °C and 30 °C.

Keep container tightly closed and in a 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*

Wear suitable gloves. 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. Check leak tightness/impermeability prior to use.

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 eyes and skin. 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:	pungent
(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:	0.83 (22 °C)
(p) Auto-ignition temperature:	310,5 °C
(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:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 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

In case of 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: 0.83 (22 °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.:	UN1325
Proper Shipping Name:	FLAMMABLE SOLIDS, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE)
Class(es):	4.1
Hazard label(s):	4.1
Packing group:	III
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:	III
Environmental hazards:	No
Marine pollutant:	No
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:	III
Special precautions for user:	

## SECTION 15: Regulatory information

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

#### SARA 313 Components

Not listed.

#### Massachusetts Right To Know Components

Not listed.

#### Pennsylvania Right To Know Components

Not listed.

#### New Jersey Right To Know Components

Not listed.

#### California Prop. 65 Components

Not listed.

## 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  
TDG - Transport of Dangerous Goods  
TLV - Threshold Limit Value  
vPvB - very Persistent, very Bioaccumulative

### 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.*