

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

- **Product identifier**
- **Trade name:** Sodium Dodecyl Sulfate, 20% Solution
- **Article number:** 198957
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Research use only.
- **Details of the supplier of the safety data sheet**
- **Further information obtainable from:** Quality Control Department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2 Hazards identification

- **Classification of the substance or mixture**



corrosion

Eye Dam. 1      H318 Causes serious eye damage.



Acute Tox. 4      H302 Harmful if swallowed.

Skin Irrit. 2      H315 Causes skin irritation.

STOT SE 3      H335 May cause respiratory irritation.

Acute Tox. 5      H313 May be harmful in contact with skin.

Acute Tox. 5      H333 May be harmful if inhaled.

Aquatic Acute 3      H402 Harmful to aquatic life.

Aquatic Chronic 3      H412 Harmful to aquatic life with long lasting effects.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05      GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*Sodium Dodecyl Sulfate, Molecular Biology Reagent*
- **Hazard statements**  
*Harmful if swallowed.*  
*May be harmful in contact with skin.*  
*May be harmful if inhaled.*  
*Causes skin irritation.*  
*Causes serious eye damage.*  
*May cause respiratory irritation.*  
*Harmful to aquatic life with long lasting effects.*

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.03.2018

Revision: 28.03.2018

**Trade name: Sodium Dodecyl Sulfate, 20% Solution**





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- **Precautionary statements**
- If medical advice is needed, have product container or label at hand.*
- Keep out of reach of children.*
- Read label before use.*
- Avoid breathing dust/fume/gas/mist/vapours/spray.*
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- Immediately call a POISON CENTER/doctor.*
- Specific treatment (see on this label).*
- Store locked up.*
- Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:**
- Mixture of substances listed below with nonhazardous additions.*
- Mixture: consisting of the following components.*

- **Dangerous components:**

151-21-3	Sodium Dodecyl Sulfate, Molecular Biology Reagent	≥10-≤25%
	 Flam. Sol. 1, H228;  Eye Dam. 1, H318;  Aquatic Chronic 2, H411;  Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335; Aquatic Acute 2, H401	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First aid measures

- **Description of first aid measures**
- **After inhalation:** *In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:** *Call for a doctor immediately.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
- No further relevant information available.*

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

AE

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.03.2018

Revision: 28.03.2018

**Trade name: Sodium Dodecyl Sulfate, 20% Solution**

(Contd. of page 2)

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15 - 30°C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 4)

AE

**Safety data sheet**  
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Revision: 28.03.2018

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(Contd. of page 3)

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Solution
Colour:	Colourless
Odour:	Indeterminate
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not determined.

· **Density:** Not determined.

· **Relative density:** Not determined.

(Contd. on page 5)

**Safety data sheet**  
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Revision: 28.03.2018

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(Contd. of page 4)

· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with · water:	- Not determined.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content: Water:	80.0 %
VOC (EC)	0.00 %
Solids content:	20.0 %
· Other information	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Dermal	LD50	2,900 mg/kg (rabbit)
Inhalative	LC50/4 h	55 mg/L

**151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent**

Oral	LD50	1,200 mg/kg (rat)
Dermal	LD50	580 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/L (ATE)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

(Contd. on page 6)

AE

**Safety data sheet**  
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Printing date 28.03.2018

Revision: 28.03.2018

Trade name: Sodium Dodecyl Sulfate, 20% Solution

Irritant

(Contd. of page 5)

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

ATE (Acute Toxicity Estimates)

Oral LC50 / 96 h 21.5-42.5 mg/L (*Oncorhynchus mykiss*)
**151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent**
Oral LC50 / 96 h 4.3-8.5 mg/L (*Oncorhynchus mykiss*)  
29 mg/L (*Pinephales promelas*)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even small quantities leak into the ground.  
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**
- **ADR, ADN, IMDG, IATA** Not regulated
- **UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Not regulated
- **Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Not regulated

(Contd. on page 7)

-AE

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2018

Revision: 28.03.2018

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(Contd. of page 6)

· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	<i>Not regulated</i>
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	<i>No</i>
· <b>Special precautions for user</b>	<i>Not applicable.</i>
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	<i>Not applicable.</i>
· <b>UN "Model Regulation":</b>	<i>Not regulated</i>

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*Sodium Dodecyl Sulfate, Molecular Biology Reagent*
- **Hazard statements**  
*Harmful if swallowed.*  
*May be harmful in contact with skin.*  
*May be harmful if inhaled.*  
*Causes skin irritation.*  
*Causes serious eye damage.*  
*May cause respiratory irritation.*  
*Harmful to aquatic life with long lasting effects.*
- **Precautionary statements**  
*If medical advice is needed, have product container or label at hand.*  
*Keep out of reach of children.*  
*Read label before use.*  
*Avoid breathing dust/fume/gas/mist/vapours/spray.*  
*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*  
*Continue rinsing.*  
*Immediately call a POISON CENTER/doctor.*  
*Specific treatment (see on this label).*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

-AE

(Contd. on page 8)

**Safety data sheet**  
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(Contd. of page 7)

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Relevant phrases**

- H228 Flammable solid.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS: Quality Control Dept.**

· **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Sol. 1: Flammable solids – Category 1
- Acute Tox. 4: Acute toxicity – Category 4
- Acute Tox. 5: Acute toxicity – Category 5
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
- Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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