

Sodium dodecyl sulphate

Safety Data Sheet

S1377

according to Regulation (EU) 2015/830

Version: 4.0

Date of issue: 08/07/2011 Revision date 07/03/2018
Supersedes 09/10/2015

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

1.1. Product identifier

Product form : Substance
Trade name : Sodium dodecyl sulphate
EC-No. : 205-788-1
CAS-No. : 151-21-3
REACH registration No : 01-2119489461-32-xxxx
Product code : S1377
Formula : C₁₂H₂₅O₄SNa
Synonyms : 1-Sodium dodecyl sulphate
Sodium Lauryl sulfate
SDS
Product group : Raw material

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem - The Netherlands
T +31(0)23-5319093 - F +31(0)23-5318027
info@duchefa.nl

1.4. Emergency telephone number

Emergency number : Supplier contact information:
+31(0)23-5319093 (M-F 09:00-17:00)
+31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	http://apps.who.int/poisoncentres/	Consult website for a local poison centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable solids, Category 2 H228
Acute toxicity (oral), Category 4 H302
Acute toxicity (inhal.), Category 4 H332
Skin corrosion/irritation, Category 2 H315

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Serious eye damage/eye irritation, Category 1 H318

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS05

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H228 - Flammable solid.
H302+H332 - Harmful if swallowed or if inhaled
H315 - Causes skin irritation
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P273 - Avoid release to the environment
P305+P351 - IF IN EYES: Rinse cautiously with water for several minutes.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Sodium dodecyl sulphate

CAS-No. : 151-21-3

EC-No. : 205-788-1

Name	Product identifier	%
Sodium dodecyl sulphate	(CAS-No.) 151-21-3 (EC-No.) 205-788-1	>= 85

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect or irritation develops.

First-aid measures after inhalation : Remove victim to fresh air
Seek medical attention if ill effect or irritation develops.

- First-aid measures after skin contact : Wash skin with mild soap and water
Seek medical attention if ill effect or irritation develops.
- First-aid measures after eye contact : Rinse with water
Seek medical attention if ill effect or irritation develops.
- First-aid measures after ingestion : Rinse mouth
Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Alcohol resistant foam.
Dry chemical powder.
Carbon dioxide (CO₂).
Water spray.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : When heated to decomposition, emits toxic fumes:
- CO_x
- SO_x.

5.3. Advice for firefighters

- Firefighting instructions : Prevent fire fighting water from entering the environment.
Protection during firefighting : Wear proper protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Wear suitable protective clothing.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate area.
Measures in case of dust release : Use good housekeeping practices to avoid rendering dust airborne.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Dispose in a safe manner in accordance with local/national regulations.
Sweep up dry powder and dispose properly.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed
Store in dry, well-ventilated area
Store at ambient temperature
Light and moisture sensitive
Hygroscopic.

7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Sodium dodecyl sulphate (151-21-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4060 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	285 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	24 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	85 mg/m ³
Long-term - systemic effects, dermal	2440 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,176 mg/l
PNEC aqua (marine water)	0,018 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	6,97 mg/kg dwt
PNEC sediment (marine water)	0,697 mg/kg dwt
PNEC (Soil)	
PNEC soil	1,29 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1,35 mg/l

8.2. Exposure controls**Hand protection:**

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

Skin and body protection:

Long sleeved protective clothing. Chemical resistant apron

Respiratory protection:

Wear appropriate mask. Filter type P3 (EN 143)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Molecular mass	: 288,4 g/mol
Colour	: White.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 9,1 (10 g/l)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 205 °C
Freezing point	: No data available
Boiling point	: 216 (1.022 mBar)
Flash point	: 170 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0,18 Pa (20 °C)
Relative vapour density at 20 °C	: ≥ 0
Relative density	: 0,2 - 0,3
Density	: 0,63 g/cm ³
Solubility	: Water: > 130 g/l (20 °C)
Log Pow	: No data available
Log Kow	: -2,03
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

Bulk density : < 400 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions of storage, handling and use.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

- Heat
- Moisture
- Light (daylight)

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Open flame.

10.5. Incompatible materials

- Strong oxidizers.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes

- COx

- SOx.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

Sodium dodecyl sulphate (151-21-3)	
LD50 oral rat	1288 mg/kg
LC50 inhalation rat (mg/l)	> 3900 mg/m ³ (1h)

Skin corrosion/irritation : Causes skin irritation.

pH: 9,1 (10 g/l)

Serious eye damage/irritation : Causes serious eye damage.

pH: 9,1 (10 g/l)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Other information : See actual entry in RTECS for complete information: WT1050000.

SECTION 12: Ecological information

12.1. Toxicity

Sodium dodecyl sulphate (151-21-3)	
LC50 fish 1	29 mg/l <i>Gasterosteus aculeatus</i> (Stickleback)
EC50 Daphnia 1	5,55 mg/l
EC50 72h algae (1)	53 mg/l
ErC50 (algae)	> 120 mg/l (72h)

12.2. Persistence and degradability

Sodium dodecyl sulphate (151-21-3)	
BOD (% of ThOD)	95 % ThOD (28d)

12.3. Bioaccumulative potential

Sodium dodecyl sulphate (151-21-3)	
Log Kow	-2,03

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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment

SECTION 13: Disposal considerations**13.1. Waste treatment methods**




Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : When not empty dispose of this container at hazardous or special waste collection point.

Additional information : Harmful to aquatic life with long lasting effects.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

ADR	IMDG	IATA
14.1. UN number		
1325	1325	1325
14.2. UN proper shipping name		
FLAMMABLE SOLID, ORGANIC, N.O.S.	FLAMMABLE SOLID, ORGANIC, N.O.S.	Flammable solid, organic, n.o.s.
Transport document description		
UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S., 4.1, III, (E)	UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S., 4.1, III	UN 1325 Flammable solid, organic, n.o.s., 4.1, III
14.3. Transport hazard class(es)		
4.1	4.1	4.1
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
Clean up even minor leaks or spills if possible without unnecessary risk		

14.6. Special precautions for user**. Overland transport**

Classification code (ADR) : F1

Special provisions (ADR) : 274

Limited quantities (ADR) : 5kg

Excepted quantities (ADR) : E1

Transport category (ADR) : 3

Hazard identification number (Kemler No.) : 40

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Orange plates



Tunnel restriction code (ADR)

: E

EAC code

: 1Z

- Transport by sea

Special provisions (IMDG)

: 223, 274, 915

Limited quantities (IMDG)

: 5 kg

Excepted quantities (IMDG)

: E1

EmS-No. (Fire)

: F-A

EmS-No. (Spillage)

: S-G

Stowage category (IMDG)

: B

- Air transport

PCA Excepted quantities (IATA)

: E1

PCA Limited quantities (IATA)

: Y443

PCA limited quantity max net quantity (IATA)

: 10kg

PCA packing instructions (IATA)

: 446

PCA max net quantity (IATA)

: 25kg

CAO packing instructions (IATA)

: 449

CAO max net quantity (IATA)

: 100kg

Special provisions (IATA)

: A3

ERG code (IATA)

: 3L

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Sodium dodecyl sulphate is not on the REACH Candidate List

Sodium dodecyl sulphate is not on the REACH Annex XIV List

15.1.2. National regulations

Ensure all national/local regulations are observed.

Germany

Reference to AwSV

: Water hazard class (WGK) 2, significant hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 664)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

1.4	Emergency number	Modified	
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves
9.1	Vapour pressure	Added	
9.1	Density	Added	

Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

Data sources : Manufacturer. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Flam. Sol. 2	Flammable solids, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1

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Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

SDS Biochemicals version 2018

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product