

according to Regulation (EC) No. 1907/2006

Revision Date 27.05.2020

Version 6.0

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

## 1.1 Product identifier

Catalogue No. D05888
Product code 7910-OP

Product name OmniPur® Sodium Dodecyl Sulfate

**REACH Registration** 

Number

01-2119489461-32-XXXX

CAS-No. 151-21-3

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

Identified uses Biochemical research/analysis

In compliance with the conditions described in the annex to

this safety data sheet.

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

Company Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49

6151 72-0

Responsible Department LS-QHC \* e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone Please contact the regional company representation in

number your country.

#### **SECTION 2. Hazards identification**

# 2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008)

Flammable solid, Category 2, H228

Acute toxicity, Category 4, Oral, H302

Acute toxicity, Category 4, Oral, H302

Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Specific target organ toxicity - single exposure, Category 3, Respiratory system, H335

Long-term (chronic) aquatic hazard, Category 3, H412 Long-term (chronic) aquatic hazard, Category 3, H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

Merck

according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

#### 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

# Hazard pictograms







# Signal word Danger

#### Hazard statements

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

# Precautionary statements

Prevention

P210 Keep away from heat.

P273 Avoid release to the environment.

P280 Wear eye protection.

#### Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

## Reduced labelling (≤125 ml)

#### Hazard pictograms







Signal word Danger

# Hazard statements

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

## Precautionary statements

P280 Wear eye protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

Contains: dodecyl sulphate sodium salt

CAS-No. 151-21-3

Page 2 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

#### 2.3 Other hazards

None known.

## **SECTION 3. Composition/information on ingredients**

#### 3.1 Substance

Formula C<sub>12</sub>H<sub>25</sub>OSO<sub>2</sub>ONa C<sub>12</sub>H<sub>25</sub>NaO<sub>4</sub>S (Hill)

EC-No. 205-788-1 Molar mass 288,37 g/mol

# Hazardous components (REGULATION (EC) No 1272/2008)

Chemical name (Concentration)

CAS-No. Registration Classification

number

dodecyl sulphate sodium salt (>= 80 % - <= 100 % )

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

151-21-3 01-2119489461-

32-XXXX Flammable solid, Category 2, H228

Acute toxicity, Category 4, H302 Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Specific target organ toxicity - single exposure, Category

3, H335

Long-term (chronic) aquatic hazard, Category 3, H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 3.2 Mixture

Not applicable

#### **SECTION 4. First aid measures**

#### 4.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

Irritation and corrosion, Cough, Shortness of breath, Tiredness Risk of serious damage to eyes.

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

Page 3 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

No information available.

# **SECTION 5. Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO2), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

# 5.2 Special hazards arising from the substance or mixture

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

Sulphur oxides

# 5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6. Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

# 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

# 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 6.4 Reference to other sections

Indications about waste treatment see section 13.

## **SECTION 7. Handling and storage**

# 7.1 Precautions for safe handling

Advice on safe handling Observe label precautions.

MERCK

# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

## Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

# 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep away from heat and sources of ignition.

Recommended storage temperature see product label.

# 7.3 Specific end use(s)

See exposure scenario in the Annex to this MSDS.

# **SECTION 8. Exposure controls/personal protection**

# 8.1 Control parameters

# **Derived No Effect Level (DNEL)**

Worker DNEL, longterm	Systemic effects	dermal	4060 mg/kg Body weight
Worker DNEL, longterm	Systemic effects	inhalation	285 mg/m <sup>3</sup>
Consumer DNEL, longterm	Systemic effects	dermal	2440 mg/kg Body weight
Consumer DNEL, longterm	Systemic effects	inhalation	85 mg/m³
Consumer DNEL, longterm	Systemic effects	oral	24 mg/kg Body weight

## **Predicted No Effect Concentration (PNEC)**

PNEC Fresh water	•	0,137 mg/l
PNEC Marine water		0,0137 mg/l
PNEC Aquatic intermittent release		0,055 mg/l
PNEC Sewage treatment plant		1084 mg/l
PNEC Fresh water sediment		4,82 mg/kg
PNEC Marine sediment		0,482 mg/kg
PNEC Soil		0,882 mg/kg

## 8.2 Exposure controls

#### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# **Individual protection measures**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Preak through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Preak through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment protective clothing

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### **Environmental exposure controls**

Do not let product enter drains.

Risk of explosion.

# **SECTION 9. Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Form powder

Colour white

Merck

# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

Odour odourless

Odour Threshold Not applicable

pH 6 - 9

at 10 g/l 20 °C

Melting point 204 - 207 °C

Boiling point/boiling range Not applicable

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) The substance or mixture is a flammable solid with the

category 2.

Flammability (solids)

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density No information available.

Density 1,1 g/cm3

at 20 °C

Relative density No information available.

Water solubility > 130 g/l

at 20 °C

Method: OECD Test Guideline 105

Partition coefficient: n-

octanol/water

Auto-ignition temperature

log Pow: <= -2,03 (20 °C) OECD Test Guideline 107 No information available.

Decomposition temperature 380 °C

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

Bulk density < 400 kg/m3

#### **SECTION 10. Stability and reactivity**

#### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

#### 10.2 Chemical stability

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

# 10.3 Possibility of hazardous reactions

strong oxidising agents

Violent reactions possible with:

#### 10.4 Conditions to avoid

no information available

# 10.5 Incompatible materials

no information available

# 10.6 Hazardous decomposition products

in the event of fire: See section 5.

# **SECTION 11. Toxicological information**

# 11.1 Information on toxicological effects

Acute oral toxicity LD50 Rat: 977 mg/kg OECD Test Guideline 401

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:,

damage of respiratory tract

Acute dermal toxicity

LD50 Rabbit: > 2.000 mg/kg OECD Test Guideline 402

Skin irritation

Rabbit

Result: Irritations

OECD Test Guideline 404 Causes skin irritation.



# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

Eye irritation

Rabbit

Result: Irreversible effects on the eye

OECD Test Guideline 405 Causes serious eye damage.

Sensitisation Maximisation Test Result: negative

(IUCLID)

Germ cell mutagenicity Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471 Mutagenicity (mammal cell test):

Mouse lymphoma test Result: negative

Method: OECD Test Guideline 476

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

May cause respiratory irritation. Target Organs: Respiratory system

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

## 11.2 Further information

After absorption of toxic quantities:

Tiredness, vasodilation

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 12. Ecological information**

# 12.1 Toxicity

Toxicity to fish

flow-through test LC50 Pimephales promelas (fathead minnow): 29 mg/l; 96 h OECD Test Guideline 203

MERCK

according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

flow-through test NOEC Pimephales promelas (fathead minnow): > 1,357 mg/l; 42

a (ECHA)

Toxicity to daphnia and other aquatic invertebrates

EC0 E.sulcatum: 40 mg/l; 72 h

(Lit.)

EC50 Daphnia magna (Water flea): 6 mg/l; 48 h

(IUCLID)

Toxicity to algae

static test EC50 Desmodesmus subspicatus (green algae): 53 mg/l; 72 h

DIN 38412

Toxicity to bacteria

microtox test EC50 Photobacterium phosphoreum: 0,46 mg/l; 30 min

(IUCLID)

EC50 activated sludge: 130 mg/l; 3 h

OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) flow-through test NOEC Ceriodaphnia dubia (water flea): 0,88 mg/l; 7 d

**US-EPA** 

# 12.2 Persistence and degradability

Biodegradability

95 %; 28 d; aerobic

OECD Test Guideline 301B

Readily biodegradable

Ratio BOD/ThBOD

BOD5 99 %

(Lit.)

## 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: <= -2,03 (20 °C) OECD Test Guideline 107

# 12.4 Mobility in soil

No information available.

# 12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

#### 12.6 Other adverse effects

Discharge into the environment must be avoided.



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

## **SECTION 13. Disposal considerations**

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# **SECTION 14. Transport information**

Land transport (ADR/RID)

**14.1 UN number** UN 1325

**14.2 Proper shipping** FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM

name DODECYL SULFATE)

14.3 Class 4.1 14.4 Packing group III 14.5 Environmentally --

hazardous

14.6 Special precautions yes

for user

Tunnel restriction code E

# Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

**14.1 UN number** UN 1325

**14.2 Proper shipping** FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM

name DODECYL SULFATE)

**14.3 Class** 4.1 **14.4 Packing group** III **14.5 Environmentally** --

hazardous

14.6 Special precautions no

for user

Sea transport (IMDG)

**14.1 UN number** UN 1325

**14.2 Proper shipping** FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM

name DODECYL SULFATE)

**14.3 Class** 4.1 **14.4 Packing group** III **14.5 Environmentally** --

hazardous

14.6 Special precautions yes

for user

EmS F-A S-G

Merck

according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

# **SECTION 15. Regulatory information**

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

EU regulations

Major Accident Hazard SEVESO III Legislation Not applicable

Occupational restrictions Take note of Dir 94/33/EC on the protection of young

people at work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or

stricter national regulations where applicable.

Regulation (EC) No 1005/2009 on substances not regulated

that deplete the ozone layer

Regulation (EC) No 850/2004 of the not regulated

European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

Substances of very high concern (SVHC) This product does not contain

> substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of ≥ 0.1 %

(w/w).

National legislation

Storage class 4.1B

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

# **SECTION 16. Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

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

Page 12 of 25



# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

#### Training advice

Provide adequate information, instruction and training for operators.

#### Labelling

Hazard pictograms







# Signal word Danger

#### Hazard statements

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

Prevention

P210 Keep away from heat.

P273 Avoid release to the environment.

P280 Wear eye protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

Contains: dodecyl sulphate sodium salt

# Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

# Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# **EXPOSURE SCENARIO 1 (Industrial use)**

## 1. Industrial use Biochemical research/analysis)

#### Sectors of end-use

SU 3 Industrial uses: Uses of substances as such or in preparations at industrial

sites

SU9 Manufacture of fine chemicals

SU 10 Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)

#### **Chemical product category**

PC19 Intermediate

PC21 Laboratory chemicals

#### **Process categories**

*PROC1* Use in closed process, no likelihood of exposure

PROC2 Use in closed, continuous process with occasional controlled exposure

*PROC3* Use in closed batch process (synthesis or formulation)

PROC4 Use in batch and other process (synthesis) where opportunity for exposure

arises

PROC5 Mixing or blending in batch processes for formulation of preparations and

articles (multistage and/ or significant contact)

PROC8a Transfer of substance or preparation (charging/ discharging) from/ to vessels/

large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/ discharging) from/ to vessels/

large containers at dedicated facilities

PROC9 Transfer of substance or preparation into small containers (dedicated filling line,

including weighing)

PROC10 Roller application or brushing

PROC14 Production of preparations or articles by tabletting, compression, extrusion,

pelletisation

PROC15 Use as laboratory reagent

#### **Environmental Release Categories**

ERC2 Formulation of preparations

ERC4 Industrial use of processing aids in processes and products, not becoming part

of articles

ERC6a Industrial use resulting in manufacture of another substance (use of

intermediates)

ERC6b Industrial use of reactive processing aids

#### 2. Contributing scenarios: Operational conditions and risk management measures

# 2.1 Contributing scenario controlling environmental exposure for: ERC2, SpERC AISE 1

#### **Amount used**

Annual amount 29950 t

Remarks European Union

Daily amount per site (Msafe) 290.240 kg

Page 14 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# **Environment factors not influenced by risk management**

Flow rate 18.000 m3/d

Dilution Factor (River) 10 Dilution Factor (Coastal Areas) 100

## Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

2.000 m3/d

plant effluent

# 2.2 Contributing scenario controlling environmental exposure for: ERC4, SpERC AISE 13

#### **Amount used**

Annual amount 6000 t

Remarks European Union

Daily amount per site (Msafe) 134,63 kg

# **Environment factors not influenced by risk management**

Flow rate 18.000 m3/d

Dilution Factor (River) 10 Dilution Factor (Coastal Areas) 100

#### Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

2.000 m3/d

plant effluent

## 2.3 Contributing scenario controlling environmental exposure for: ERC6a

#### **Amount used**

Annual amount 130 t

Remarks European Union

Daily amount per site (Msafe) 7.296 kg

# **Environment factors not influenced by risk management**

Flow rate 18.000 m3/d

Dilution Factor (River) 10
Dilution Factor (Coastal Areas) 100

#### Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Municipal sewage treatment plant

Plant

Flow rate of sewage treatment 2.000 m3/d

plant effluent

Page 15 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# 2.4 Contributing scenario controlling environmental exposure for: ERC6b

**Amount used** 

Annual amount 550 t

Remarks European Union

Daily amount per site (Msafe) 2.926 kg

**Environment factors not influenced by risk management** 

Flow rate 18.000 m3/d

Dilution Factor (River) 10
Dilution Factor (Coastal Areas) 100

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

2.000 m3/d

plant effluent

# 2.5 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC14, PROC15

**Product characteristics** 

Concentration of the Covers the percentage of the substance in the product

Substance in Mixture/Article up to 100 % (unless stated differently).

Physical Form (at time of use) Solid, high dustiness

Frequency and duration of use

Frequency of use 8 hours/day

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor without local exhaust ventilation (LEV)

Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

Additional good practice advice beyond the REACH Chemical Safety Assessment

Additional good practice Wear suitable gloves (tested to EN374) and eye

advice protection.

2.6 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC14, PROC15

**Product characteristics** 

Concentration of the Covers the percentage of the substance in the product

Substance in Mixture/Article up to 100 % (unless stated differently).

Page 16 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

Physical Form (at time of use) Aqueous solution

Frequency and duration of use

Frequency of use 8 hours/day

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor without local exhaust ventilation (LEV)

Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

Additional good practice advice beyond the REACH Chemical Safety Assessment

Additional good practice

Wear suitable gloves (tested to EN374) and eye

advice protection.

# 3. Exposure estimation and reference to its source

## **Environment**

CS	Use descriptor	Msafe	Compartment	RCR	Exposure Assessment Method
2.1	ERC2	290240 kg/day	Marine water	0,06	ECETOC TRA 2
2.2	ERC4	134,63 kg/day	Marine water	0,37	ECETOC TRA 2
2.3	ERC6a	7296 kg/day	Marine water	0,89	ECETOC TRA 2
2.4	ERC6b	2926 kg/day	Marine water	0,94	ECETOC TRA 2

# according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# **Workers**

TT OI K	Ci 3			
CS	Use descriptor	Exposure duration, route, effect RCR		Exposure Assessment Method
2.5	2.5 PROC1 longterm, inhalative, syst		< 0,01	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	< 0,01	
2.5	PROC2	longterm, inhalative, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	< 0,01	
2.5	PROC3	longterm, inhalative, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	< 0,01	
2.5	PROC4	longterm, inhalative, systemic	0,06	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,06	
2.5	PROC5	longterm, inhalative, systemic	0,06	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,06	
2.5	PROC8a	longterm, inhalative, systemic	0,12	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,12	
2.5	PROC8b	longterm, inhalative, systemic	0,06	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,06	
2.5	PROC9	longterm, inhalative, systemic	0,05	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,05	
2.5	PROC10	longterm, inhalative, systemic	0,02	ECETOC TRA 2, Solid
		longterm, dermal, systemic	0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,03	
2.5	PROC14	longterm, inhalative, systemic	0,02	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,02	
2.5	PROC15	longterm, inhalative, systemic	0,01	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,01	



# SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

2.6	PROC1	longterm, inhalative, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	< 0,01	
2.6	PROC2	longterm, inhalative, systemic	0,04	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,04	
2.6	PROC3	longterm, inhalative, systemic	0,13	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,13	
2.6	PROC4	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	
2.6	PROC5	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	
2.6	PROC8a	longterm, inhalative, systemic	0,42	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,42	
2.6	PROC8b	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	
2.6	PROC9	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	
2.6	PROC10	longterm, inhalative, systemic	0,42	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,42	
2.6	PROC14	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	
2.6	PROC15	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	

The default parameters and -efficiencies of the applied exposure assessment model were used for the calculation (unless stated differently).



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Please refer to the following documents: ECHA Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system; ECHA Guidance for downstream users; ECHA Guidance on information requirements and chemical safety assessment Part D: Exposure Scenario Building, Part E: Risk Characterisation and Part G: Extending the SDS; VCI/Cefic REACH Practical Guides on Exposure Assessment and Communications in the Supply Chain; CEFIC Guidance Specific Environmental Release Categories (SPERCs).

For scaling of worker exposure assessments performed with ECETOC TRA, please consult the Merck tool ScIDeEx® at www.merckmillipore.com/scideex.



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# **EXPOSURE SCENARIO 2 (Professional use)**

# 1. Professional use Biochemical research/analysis)

#### **Sectors of end-use**

SU 22 Professional uses: Public domain (administration, education, entertainment,

services, craftsmen)

# **Chemical product category**

PC21 Laboratory chemicals

# **Process categories**

PROC15 Use as laboratory reagent

# **Environmental Release Categories**

ERC2 Formulation of preparations

ERC6a Industrial use resulting in manufacture of another substance (use of

intermediates)

ERC6b Industrial use of reactive processing aids

# 2. Contributing scenarios: Operational conditions and risk management measures

# 2.1 Contributing scenario controlling environmental exposure for: ERC2, SpERC AISE 1

#### **Amount used**

Annual amount 29950 t

Remarks European Union

Daily amount per site (Msafe) 290.240 kg

# **Environment factors not influenced by risk management**

Flow rate 18.000 m3/d

Dilution Factor (River) 10 Dilution Factor (Coastal Areas) 100

## Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

2.000 m3/d

plant effluent

# 2.2 Contributing scenario controlling environmental exposure for: ERC6a

#### Amount used

Annual amount 130 t

Remarks European Union

Daily amount per site (Msafe) 7.296 kg

# **Environment factors not influenced by risk management**

Flow rate 18.000 m3/d

Page 22 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

Dilution Factor (River) 10 Dilution Factor (Coastal Areas) 100

# Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

plant effluent

2.000 m3/d

# 2.3 Contributing scenario controlling environmental exposure for: ERC6b

#### **Amount used**

Annual amount 550 t

Remarks European Union

Daily amount per site (Msafe) 2.926 kg

# **Environment factors not influenced by risk management**

18.000 m3/d Flow rate

Dilution Factor (River) 10 Dilution Factor (Coastal Areas) 100

# Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment

Municipal sewage treatment plant

Plant

Flow rate of sewage treatment

plant effluent

2.000 m3/d

#### 2.4 Contributing scenario controlling worker exposure for: PROC15

# **Product characteristics**

Concentration of the Covers the percentage of the substance in the product

Substance in Mixture/Article up to 100 % (unless stated differently).

Physical Form (at time of use) Solid, high dustiness

# Frequency and duration of use

Frequency of use 8 hours/day

# Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor without local exhaust ventilation (LEV)

# Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

# Additional good practice advice beyond the REACH Chemical Safety Assessment

Wear suitable gloves (tested to EN374) and eye Additional good practice

advice protection.

Page 23 of 25



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# 2.5 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC14, PROC15

#### **Product characteristics**

Concentration of the Covers the percentage of the substance in the product

Substance in Mixture/Article up to 100 % (unless stated differently).

Physical Form (at time of use) Aqueous solution

## Frequency and duration of use

Frequency of use 8 hours/day

# Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor without local exhaust ventilation (LEV)

# Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

# Additional good practice advice beyond the REACH Chemical Safety Assessment

Additional good practice Wear suitable gloves (tested to EN374) and eye

advice protection.

# 3. Exposure estimation and reference to its source

#### **Environment**

CS	Use descriptor	Msafe	Compartment	RCR	Method
2.1	ERC2	290240 kg/day	Marine water	0,06	ECETOC TRA 2
2.2	ERC6a	7296 kg/day	Marine water	0,89	ECETOC TRA 2
2.3	ERC6b	2926 kg/day	Marine water	0,94	ECETOC TRA 2

## Workers

CS	Use descriptor	Exposure duration, route, effect	RCR	Exposure Assessment Method
2.4	PROC15	longterm, inhalative, systemic	0,01	ECETOC TRA 2, Solid
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Solid
		longterm, combined, systemic	0,01	
2.5	PROC15	longterm, inhalative, systemic	0,21	ECETOC TRA 2, Aqueous solution
		longterm, dermal, systemic	< 0,01	ECETOC TRA 2, Aqueous solution
		longterm, combined, systemic	0,21	

The default parameters and -efficiencies of the applied exposure assessment model were used for the calculation (unless stated differently).



according to Regulation (EC) No. 1907/2006

Catalogue No. D05888

Product name OmniPur® Sodium Dodecyl Sulfate

# 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Please refer to the following documents: ECHA Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system; ECHA Guidance for downstream users; ECHA Guidance on information requirements and chemical safety assessment Part D: Exposure Scenario Building, Part E: Risk Characterisation and Part G: Extending the SDS; VCI/Cefic REACH Practical Guides on Exposure Assessment and Communications in the Supply Chain; CEFIC Guidance Specific Environmental Release Categories (SPERCs).

For scaling of worker exposure assessments performed with ECETOC TRA, please consult the Merck tool ScIDeEx® at www.merckmillipore.com/scideex.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

