

according to Regulation (EC) No. 1907/2006

Revision Date 05.02.2015

Version 6.1

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

1.1 Product identifier

Catalogue No. 841029

Product name Octadecylamine for synthesis

REACH Registration Number A registration number is not available for this substance as the

substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a

later registration deadline.

CAS-No. 124-30-1

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

Identified uses Chemical for synthesis

For additional information on uses please refer to the Merck Chemicals

portal (www.merckgroup.com).

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

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Specific target organ toxicity - repeated exposure, Category 2, Liver, Gastro-intestinal system,

Immune system, H373

Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410 Aspiration hazard, Category 1, H304

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

Classification (67/548/EEC or 1999/45/EC)

Xn Harmful R48/22 - 65
Xi Irritant R38 - 41
Dangerous for the environment R50/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

Catalogue No. 841029

Product name Octadecylamine for synthesis

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal word

Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs (Liver, Gastro-intestinal system, Immune system) through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.

P280 Wear eye protection.

Response

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

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.

P314 Get medical advice/ attention if you feel unwell.

Reduced labelling (≤125 ml)

Hazard pictograms







Signal word

Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

Precautionary statements

P280 Wear eye protection.

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Index-No. 612-282-00-8

2.3 Other hazards

None known.

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

SECTION 3. Composition/information on ingredients

3.1 Substance

Formula $C_{18}H_{39}N$ (Hill) Index-No. 612-282-00-8 EC-No. 204-695-3 Molar mass 269,51 g/mol

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

Chemical Name (Concentration)

CAS-No. Registration number Classification

Octadecylamine (<= 100 %)

124-30-1 *)

Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

Specific target organ toxicity - repeated exposure, Category 2,

H373

Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410 Aspiration hazard, Category 1, H304

M-Factor: 10

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

Hazardous components (1999/45/EC)

Chemical Name (Concentration)
CAS-No. Classification
Octadecylamine (<= 100 %)

124-30-1 Xn, Harmful; Xn; R48/22-65

Xi, Irritant; Xi; R38-41

N, Dangerous for the environment; R50/53

M-Factor: 10

For the full text of the R-phrases 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. Call in physician.

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

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

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

^{*)} A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

irritant effects, Cough, Shortness of breath

Risk of serious damage to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Foam, 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.

Forms explosive mixtures with air on intense heating.

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

Fire may cause evolution of:

nitrogen 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 substance contact. Avoid inhalation of dusts. Ensure adequate ventilation. 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 empty into drains.

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.

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

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.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

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.

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
Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Break 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

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

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 empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form powder

Colour white

Odour odourless

Odour Threshold Not applicable

pH No information available.

Melting point 50 - 52 °C

Boiling point/boiling range 132 °C

at 43 hPa

Flash point 110 °C

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure < 100 hPa

at 20 °C

Relative vapour density No information available.

Density 0,86 g/cm³

at 20 °C

Relative density No information available.

Water solubility at 20 °C

practically insoluble

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

Partition coefficient: n-

octanol/water

log Pow: 7,71

(calculated)

Potential bioaccumulation

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic 7 mPa.s

at 60 °C

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

none

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.

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Oxidizing agents, Acid anhydrides, acid halides, acids

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitosamines!

10.4 Conditions to avoid

Strong heating.

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: 2.395 mg/kg (RTECS)

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

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

Acute inhalation toxicity

Symptoms: Possible damages:, mucosal irritations, Inhalation may lead to the formation of oedemas in the respiratory tract.

Acute dermal toxicity

This information is not available.

Skin irritation

Rabbit

Result: Irritations

(RTECS)

Causes skin irritation.

Eye irritation

Rabbit

Result: Severe irritations

(External MSDS)

Causes serious eye damage.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

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

This information is not available.

Specific target organ toxicity - repeated exposure

Target Organs: Liver, Gastro-intestinal system, Immune system

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary oedema and pneumonitis.

11.2 Further information

Under given conditions, contact with nitrites or nitric acid can lead to the formation of nitrosamines, which have shown themselves to be carcinogenic in animal experiments.

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 daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 0,011 mg/l; 48 h (ECOTOX Database)

Toxicity to algae

ErC50 algae: 0,82 - 1,07 mg/l; 72 h

OECD Test Guideline 201

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test NOEC Daphnia magna (Water flea): 0,013 mg/l; 21 d (ECHA)

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 7,71 (calculated)

Potential bioaccumulation

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Additional ecological information

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking- water supplies.

Discharge into the environment must be avoided.

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 3077

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (OCTADECYLAMINE)

14.3 Class914.4 Packing groupIII14.5 Environmentally hazardousyes14.6 Special precautions foryes

user

Tunnel restriction code E

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number UN 3077

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (OCTADECYLAMINE)

14.3 Class914.4 Packing groupIII14.5 Environmentally hazardousyes

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

14.6 Special precautions for

no

user

Packages smaller than or equal to 5 kg / L, not dangerous goods of Class 9

Sea transport (IMDG)

14.1 UN number UN 3077

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (OCTADECYLAMINE)

14.3 Class914.4 Packing groupIII14.5 Environmentally hazardousyes14.6 Special precautions foryes

user

EmS F-A S-F

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

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 96/82/EC

Legislation Dangerous for the environment

9a

Quantity 1: 100 t Quantity 2: 200 t

Occupational restrictions

Take note of Dir 94/33/EC on the protection of young people at

work.

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

deplete the ozone layer

Regulation (EC) No 850/2004 of the European not regulated Parliament and of the Council of 29 April 2004 on

persistent organic pollutants and amending

Directive 79/117/EEC

Regulation (EC) No 689/2008 concerning the export not regulated

and import of dangerous chemicals

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 \geq 0.1 % (w/w).

National legislation

Storage class 10 - 13

15.2 Chemical Safety Assessment

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

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

SECTION 16. Other information

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

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated

exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Full text of R-phrases referred to under sections 2 and 3

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R48/22 Harmful: danger of serious damage to health by prolonged

exposure if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

Training advice

Provide adequate information, instruction and training for operators.

Labelling

Hazard pictograms







Signal word Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs (Liver, Gastro-intestinal system, Immune system) through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.

P280 Wear eye protection.

Response

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

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. P314 Get medical advice/ attention if you feel unwell.

according to Regulation (EC) No. 1907/2006

Catalogue No. 841029

Product name Octadecylamine for synthesis

Labelling (67/548/EEC or 1999/45/EC)

50/53

Symbol(s) Xn Harmful

R-phrase(s) 38-41-48/22-65- Irritating to skin. Risk of serious damage to eyes. Harmful:

danger of serious damage to health by prolonged exposure if swallowed. Harmful: may cause lung damage if swallowed.

Very toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

EC-No. 204-695-3 EC Label

Reduced labelling (≤125 ml)

Symbol(s) Xn Harmful

R-phrase(s) 41-48/22-65 Risk of serious damage to eyes. Harmful: danger of serious damage

to health by prolonged exposure if swallowed. Harmful: may cause

lung damage if swallowed.

S-phrase(s) 26-36/37/39-62 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves

and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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.