# **SAFETY DATA SHEET**

Version 5.1 Revision Date 04/02/2014 Print Date 04/23/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : 2-Naphthol

Product Number : 130109
Brand : Aldrich
Index-No. : 604-007-00-5

REACH No. : A registration number is not available for this substance as the substance

or its uses are exempted from registration, the annual tonnage does not

require a registration or the registration is envisaged for a later

registration deadline.

CAS-No. : 135-19-3

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Eve irritation (Category 2A), H319

Acute aquatic toxicity (Category 1), H400

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 + H332 Harmful if swallowed or if inhaled H319 Causes serious eye irritation. H400 Very toxic to aquatic life.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you

feel unwell.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

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

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

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P330 Rinse mouth.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : β-Naphthol

2-Hydroxynaphthalene

Formula : C<sub>10</sub>H<sub>8</sub>O Molecular Weight : 144.17 g/mol CAS-No. : 135-19-3 EC-No. : 205-182-7 Index-No. : 604-007-00-5

Hazardous components

Component	Classification	Concentration
2-Naphthol		
	Acute Tox. 4; Eye Irrit. 2A;	-
	Aquatic Acute 1; H302 +	
	H332, H319, H400	

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

# 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

# In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

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# 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Light sensitive.

# 7.3 Specific end use(s)

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

## Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

## Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

## Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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## Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Chloroprene

Minimum layer thickness: 0.6 mm Break through time: 480 min

Material tested: Camapren® (KCL 722 / Aldrich Z677493, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm Break through time: 30 min

Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

## **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour no data availablec) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing Melting point/range: 120 - 122 °C (248 - 252 °F) - lit.

point

f) Initial boiling point and 285 - 286 °C (545 - 547 °F) - lit.

boiling range

g) Flash point 153 °C (307 °F) - closed cup

h) Evapouration rate no data available
 i) Flammability (solid, gas) no data available
 j) Upper/lower no data available

flammability or explosive limits

k) Vapour pressure 13 hPa (10 mmHg) at 145.5 °C (293.9 °F)

I) Vapour density no data availablem) Relative density no data availablen) Water solubility no data available

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 Partition coefficient: n- no data available octanol/water

Auto-ignition temperature

no data available

q) Decomposition

no data available

temperature

r) Viscosity no data available
 s) Explosive properties no data available
 t) Oxidizing properties no data available

# 9.2 Other safety information

no data available

# 10. STABILITY AND REACTIVITY

# 10.1 Reactivity

no data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

Strong oxidizing agents, Strong bases

# 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - rat - 1,960 mg/kg

LC50 Inhalation - rat - 1 h - > 770 mg/m3

Remarks: Gastrointestinal: Changes in structure or function of salivary glands.

LD50 Dermal - rabbit - > 10,000 mg/kg

no data available

#### Skin corrosion/irritation

no data available

# Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitisation

no data available

# Germ cell mutagenicity

in vitro assay S. typhimurium Result: negative

mouse - male Result: negative

## Carcinogenicity

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IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

no data available

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

no data available

## **Aspiration hazard**

no data available

## **Additional Information**

RTECS: QL2975000

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., Damage to the eyes., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 3.46 mg/l - 96.0 h

## 12.2 Persistence and degradability

Biodegradability Zahn-Wellens Test - Exposure time 15 d

Result: 92 % - Readily biodegradable.

# 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data 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

Very toxic to aquatic life.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

# 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

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# 14. TRANSPORT INFORMATION

## DOT (US)

Not dangerous goods

**IMDG** 

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Naphthol)

Marine pollutant: Marine pollutant

IATA

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (2-Naphthol)

#### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

#### 15. REGULATORY INFORMATION

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or its uses are exempted from registration, the annual tonnage does not

require a registration or the registration is envisaged for a later

registration deadline.

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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2-Naphthol 135-19-3

**New Jersey Right To Know Components** 

CAS-No. Revision Date

2-Naphthol 135-19-3

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### 16. OTHER INFORMATION

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

Acute Tox. Acute toxicity

Eye Irrit. Eye irritation

H302 Harmful if swallowed.

H302 + H332 Harmful if swallowed or if inhaled H319 Causes serious eye irritation.

H332 Harmful if inhaled.

**HMIS Rating** 

Health hazard: 2 Chronic Health Hazard: \*

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Flammability: 1 Physical Hazard 0

**NFPA** Rating

Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0

# **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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