

according to the Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 09/28/2012

Version 1.1

#### **SECTION 1. Identification**

#### Product identifier

Product number 814085

Product name Dehydracetic acid sodium salt for synthesis

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

Identified uses Chemical for synthesis

# Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | SDS Phone Support: +1-978-715-1335 | General Inquiries: +1-978-751-4321 | Monday to Friday, 9:00 AM to

4:00 PM Eastern Time (GMT-5)

e-mail: mm\_sds@merckgroup.com

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

#### SECTION 2. Hazards identification

### **GHS Classification**

Acute toxicity, Category 4, Oral, H302

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

# **GHS-Labeling**

Hazard pictograms



Signal Word Warning

Hazard Statements

H302 Harmful if swallowed.

### **OSHA Hazards**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

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1910.1200). **Other hazards** 

None known.

# SECTION 3. Composition/information on ingredients

Formula  $C_8H_7NaO_4$  (Hill) CAS-No. 4418-26-2 Molar mass 190.13 g/mol

#### Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

sodium dehydroacetate ( >= 90 % - <= 100 % )

4418-26-2

# SECTION 4. First aid measures

# Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing.

Eve contact

After eye contact: rinse out with plenty of water.

Ingestion

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

Never give anything by mouth to an unconscious person.

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

We have no description of any toxic symptoms.

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

No information available.

# SECTION 5. Fire-fighting measures

# Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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

#### Special hazards arising from the substance or mixture

Combustible.

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

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# Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### SECTION 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

#### **Environmental precautions**

Do not empty into drains.

#### 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.

# SECTION 7. Handling and storage

#### Precautions for safe handling

Observe label precautions.

# Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at +15°C to +25°C (+59°F to +77°F).

# SECTION 8. Exposure controls/personal protection

#### Exposure limit(s)

Contains no substances with occupational exposure limit values.

#### **Engineering measures**

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

#### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.

Eye/face protection

Safety glasses

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#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### Recommended:

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

#### Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

# SECTION 9. Physical and chemical properties

Physical state powder, finecrystalline

Color colorless

Odor odorless

Odor Threshold not applicable

pH 8.8 - 9.3

at 100 g/l 68 °F ( 20 °C)

Melting point 536 - 545 °F ( 280 - 285 °C)

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure No information available.

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Relative vapor density No information available.

Relative density No information available.

Water solubility 330 g/l

at 68 °F (20 °C)

Partition coefficient: n-

octanol/water (ca

log Pow: -0.32 (calculated)

(Lit.) Bioaccumulation is not expected (log Pow <1).

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Ignition temperature 680 °F ( 360 °C)

Bulk density 500 - 550 kg/m<sup>3</sup>

# SECTION 10. Stability and reactivity

# 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.

#### Chemical stability

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

# Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

# Conditions to avoid

no information available

# Incompatible materials

no information available

# Hazardous decomposition products

no information available

# SECTION 11. Toxicological information

# Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

according to the Hazard Communication Standard (29 CFR 1910.1200)

Product number 814085 Version 1.1

Product name Dehydracetic acid sodium salt for synthesis

Acute oral toxicity

LD50 rat: 500 mg/kg (External MSDS)

absorption

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

(National Toxicology Program)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

# Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

### **Further information**

After absorption:

We have no description of any toxic symptoms.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12. Ecological information**

#### **Ecotoxicity**

No information available.

# Persistence and degradability

No information available.

# Bioaccumulative potential

according to the Hazard Communication Standard (29 CFR 1910.1200)

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Partition coefficient: n-octanol/water

log Pow: -0.32 (calculated)

(Lit.) Bioaccumulation is not expected (log Pow <1).

#### Mobility in soil

No information available.

#### Other adverse effects

#### **SECTION 13. Disposal considerations**

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

# SECTION 14. Transport information

#### Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

#### Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

# Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

# SECTION 15. Regulatory information

#### **United States of America**

#### **OSHA Hazards**

Combustible dust

Toxic by ingestion

This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS, and may deviate from the GHS information on the label and in section 2.

# **TSCA list**

Not relevant

#### SARA 311/312 Hazards

Acute Health Hazard

# Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

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#### **US State Regulations**

# Massachusetts Right To Know

Remarks

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

# Pennsylvania Right To Know

Ingredients

sodium dehydroacetate

# **New Jersey Right To Know**

Ingredients

sodium dehydroacetate

### California Prop 65 Components

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

#### **Notification status**

TSCA: On TSCA Inventory

DSL: All components of this product are on the Canadian DSL.

### SECTION 16. Other information

#### Hazardous Materials Information System (U.S.A)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

# Training advice

Provide adequate information, instruction and training for operators.

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

H302 Harmful if swallowed.

# 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.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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