# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1/7
Revision Date 22-Apr-2024
Version 3

ALFAAB21060

# Sodium dehydroacetate

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 脱氢醋酸钠

Product Description: Sodium dehydroacetate

Cat No.: B21060

Synonyms 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione sodium salt

CAS No 4418-26-2 Molecular Formula C8 H7 O4 Na

**Supplier** Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US:**001-800-424-9300 / **Europe:**001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

### **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorPowder SolidLight yellowOdorless

Emergency Overview Harmful if swallowed.

Classification of the substance or mixture

Acute Oral Toxicity Category 4

### **Label Elements**



Signal Word Warning

Hazard Statements H302 - Harmful if swallowed

Page 2/7 Revision Date 22-Apr-2024

### Sodium dehydroacetate

### **Precautionary Statements**

#### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

### Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

### Storage

P403 - Store in a well-ventilated place

#### Disposal

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

### **Physical and Chemical Hazards**

None identified.

### **Health Hazards**

Harmful if swallowed.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

Toxic to terrestrial vertebrates. This product does not contain any known or suspected endocrine disruptors.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %		
Sodium dehydroacetate	4418-26-2	99		

### **SECTION 4. FIRST AID MEASURES**

### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

### Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

### Ingestion

Clean mouth with water. Get medical attention.

### Most important symptoms and effects

No information available.

### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### Notes to Physician

Treat symptomatically.

### **SECTION 5. FIRE-FIGHTING MEASURES**

### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

### Extinguishing media which must not be used for safety reasons

Page 3/7 Revision Date 22-Apr-2024

### Sodium dehydroacetate

No information available.

### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation.

### **Environmental Precautions**

See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid contact with skin and eyes. Do not breathe dust.

### Storage

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

### Specific Use(s)

Use in laboratories

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

### **Exposure Controls**

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Page 4/7 Revision Date 22-Apr-2024

### Sodium dehydroacetate

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber Neoprene Natural rubber PVC	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection** No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Small scale/Laboratory use Maintain adequate ventilation

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

No information available. **Environmental exposure controls** 

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** Light yellow Powder Solid **Physical State** 

Odorless Odor

**Odor Threshold** No data available

рΗ 8.8-9.3

**Melting Point/Range** 295 - 112 °C / 563 - 233.6 °F

**Softening Point** No data available **Boiling Point/Range** No information available

**Flash Point** No information available Method - No information available

**Evaporation Rate** Not applicable Solid

No information available Flammability (solid,gas) No data available

**Explosion Limits** 

No data available **Vapor Pressure** Not applicable

**Vapor Density** Solid

Specific Gravity / Density No data available **Bulk Density** No data available Water Solubility 330 g/l water (25°C) Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** 360 °C / 680 °F **Decomposition Temperature** No data available

Not applicable Solid Viscosity

**Explosive Properties** No information available **Oxidizing Properties** No information available

C8 H7 O4 Na Molecular Formula 190.13 **Molecular Weight** 

Page 5/7 Revision Date 22-Apr-2024

Sodium dehydroacetate

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### **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable.

Hazardous Reactions No information available.

**Hazardous Polymerization** Hazardous polymerization does not occur.

Conditions to Avoid None known.

Materials to avoid No information available.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Product Information**

(a) acute toxicity:

the manufacture of the second									
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation						
Sodium dehydroacetate	LD50 = 500 mg/kg (Rat)								

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

**Respiratory Skin**No data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available

delayed

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not

**SECTION 12. ECOLOGICAL INFORMATION** 

Page 6 / 7 Revision Date 22-Apr-2024

### Sodium dehydroacetate

degradable in waste water treatment plants.

Persistence and Degradability

Persistence

Soluble in water, Persistence is unlikely, based on information available.

Bioaccumulative Potential Bioaccumulation is unlikely

Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

### **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

### **SECTION 15. REGULATORY INFORMATION**

### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)		TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Sodium dehydroacetate	-	X	Χ	Х	224-580-1	Х	Х	Х	Х	Х	Х	KE-00124

Page 7/7 Revision Date 22-Apr-2024

### Sodium dehydroacetate

**National Regulations** 

### **SECTION 16. OTHER INFORMATION**

**Prepared By** Health, Safety and Environmental Department

**Revision Date** 22-Apr-2024

**Revision Summary** New emergency telephone response service provider.

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Legend

**CAS** - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

TSCA - United States Toxic Substances Control Act Section 8(b)

Inventory

Substances List

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### Disclaimer

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# **End of Safety Data Sheet**