# Chemical Safety Data Sheet MSDS / SDS

# Sodium cacodylate trihydrate

Revision Date: 2024-05-18 Revision Number: 1

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

#### **Product identifier**

Product name : Sodium cacodylate trihydrate

CBnumber : CB0104234

CAS : 6131-99-3

EINECS Number : 682-793-9

Synonyms : sodium cacodylate trihydrate, SODIUM CACODYLATE

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

# **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

### Precautionary statements

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

P273 Avoid release to the environment.

P281 Use personal protective equipment as required.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P311 Call a POISON CENTER or doctor/physician.

P405 Store locked up.

P501 Dispose of contents/container to.....

#### Hazard statements

H301 Toxic if swalloed

H331 Toxic if inhaled

H351 Suspected of causing cancer

H400 Very toxic to aquatic life

H402 Harmful to aquatic life

H410 Very toxic to aquatic life with long lasting effects

H412 Harmful to aquatic life with long lasting effects

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : Sodium cacodylate trihydrate

Synonyms : sodium cacodylate trihydrate, SODIUM CACODYLATE

CAS : 6131-99-3

EC number : 682-793-9

MF : C2H10AsNaO3

MW : 180.01

# SECTION 4: First aid measures

#### Description of first aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

## 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. Take victim immediately to hospital. Consult a physician.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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

# 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

# Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

# **Extinguishing media**

#### Suitable extinguishing media

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

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

Carbon oxides Sodium oxides Arsenic oxides Not combustible.

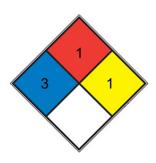
#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**



Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid, calcium</u>

HEALTH 3

hypochlorite, hexafluorosilicic acid)

1 can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia)

Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion

REACT 1 Normally stable, but can become unstable at elevated temperatures and pressures (e.g. propene)

SPEC.

FIRE

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

# **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.

# 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.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Advice on safe

#### handling

Avoid exposure - obtain special instructions before use.

# Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

For precautions see section 2.2.

#### Conditions for safe storage, including any incompatibilities

# Storage conditions

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

Moisture sensitive.

#### 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

# control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

# **Exposure controls**

#### Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril? (KCL 740 / Aldrich Z677272, 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 EC 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

Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Appearance	solid
Odour	No data available
Odour Threshold	No data available
рН	9.0-9.5 (100g/l, H2O, 20°ℂ)
Melting point/freezing point	77-80 °C
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available No data available
Water solubility	H <sub>2</sub> O: 0.5 M at 20 °C, clear, colorless
Partition coefficient: n-octanol/water	No data available

Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available

# Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# **Conditions to avoid**

Avoid moisture.

# Incompatible materials

No data available

# Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# Information on toxicological effects

#### **Acute toxicity**

Oral

Inhalation: absorption

Acute toxicity estimate Inhalation - 0,6 mg/l (Expert judgment)

LD50 Dermal - Rabbit - > 2.000 mg/kg Remarks: (External MSDS)

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

# **SECTION 12: Ecological information**

# **Toxicity**

#### Toxicity to fish

LC50 - Lepomis macrochirus (Bluegill sunfish) - 17 mg/l - 96 h Remarks: (anhydrous substance)

(ECOTOX Database)

(Regulation (EC) No 1272/2008, Annex VI)

#### Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 53,5 mg/l - 48 h Remarks: (anhydrous substance)

(ECOTOX Database)

(Regulation (EC) No 1272/2008, Annex VI)

# Persistence and degradability

# Bioaccumulative potential

No data available

# Mobility in soil

No data available

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# Other adverse effects

Very toxic to aquatic life with long lasting effects. Discharge into the environment must be avoided.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or

mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

#### Incompatibilities

Incompatible with oxidizers, strong bases; acids, active metals (iron, aluminum, zinc). Contact with acids react to form highly toxic dimethylarsine gas. Attacks some metals.

#### **Waste Disposal**

For cacodylic acid, precipitate as calcium arsenate and calcium arsenite by treatment with excess lime water. Recycle if possible. If not, put in secure storage for possible disposal in leach-proof dumps.

# Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

#### **UN** number

ADR/RID: 1688 IMDG: 1688 IATA: 1688

#### **UN proper shipping name**

ADR/RID: SODIUM CACODYLATE IMDG: SODIUM CACODYLATE

IATA: Sodium cacodylate

14.3	Transport hazard class(es)		
	ADR/RID: 6.1 IMDG: 6.1	IATA: 6.1	
14.4	Packaging group		
	ADR/RID: II IMDG: II	IATA: II	
14.5	Environmental hazards		
	ADR/RID: yes IMDG Marine pollutant: yes	IATA: no	
14.6	Special precautions for user		
	No data available		

# SECTION 15: Regulatory information

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

# Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

EC Inventory:Not Listed.

European Inventory of Existing Commercial Chemical Substances (EINECS): Not Listed. website: https://echa.europa.eu/

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

United States Toxic Substances Control Act (TSCA) Inventory: Not Listed. website: https://www.epa.gov/

# **SECTION 16: Other information**

### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit TWA: Time Weighted Average

# References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

[6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

 $\hbox{\tt [7] HSDB-Hazardous Substances Data Bank, website: $https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm}$ 

[8] IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

[9] IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.