

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

**1.1 Product identifier**

**Cobalt-Edta**

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

**1.2.1 Relevant uses**

Biogas plants additive

**1.2.2 Uses advised against**

None known.

**1.3 Details of the supplier of the safety data sheet**

**Company**

Kanadevia Inova Schmack GmbH  
Bayernwerk 8  
92421 Schwandorf / GERMANY  
Phone +49 9431 751-277  
Fax +49 (0)9431-751-204  
Homepage [www.kanadevia-inova.com/schmack-biogas](http://www.kanadevia-inova.com/schmack-biogas)  
E-mail [info@kanadevia-inova.com](mailto:info@kanadevia-inova.com)

**Address enquiries to**

**Technical information**

[info@kanadevia-inova.com](mailto:info@kanadevia-inova.com)

**Safety Data Sheet**

[sdb@chemiebuero.de](mailto:sdb@chemiebuero.de) (No dispatch of safety data sheets)  
Safety data sheets are available from the supplier.

**1.4 Emergency telephone number**

**Company**

+49 (0)9431-751-0

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]**

Acute Tox. 4: H302 Harmful if swallowed.  
Skin Sens. 1: H317 May cause an allergic skin reaction.

**2.2 Label elements**

**Hazard pictograms**



The product is required to be labelled in accordance with regulation CLP.

**Signal word**

WARNING

**Contains:**

cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate

cobalt diammonium edta

Cobalt disodium ethylenediaminetetraacetate

**Hazard statements**

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

**Precautionary statements**

P261 Avoid breathing dust.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

P501 Dispose of contents/container in accordance with local/national regulation.

**2.3 Other hazards**

**Human health dangers**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Environmental hazards**

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 hazards**

Further hazards were not determined with the current level of knowledge.

### SECTION 3: Composition / Information on ingredients

#### 3.1 Substances

not applicable

#### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
0 -100	cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate
	CAS: 24704-41-4, EINECS/ELINCS: 825-116-6, Reg-No.: 01-2120784246-47-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Sens. 1: H317
0 -100	cobalt diammonium edta
	CAS: 94233-08-6, EINECS/ELINCS: 304-038-1
	GHS/CLP: Skin Sens. 1: H317
0 -100	Cobalt disodium ethylenediaminetetraacetate
	CAS: 15137-09-4, EINECS/ELINCS: 239-198-0, Reg-No.: 01-2120778183-49-XXXX
	GHS/CLP: Skin Sens. 1: H317 - Acute Tox. 4: H302

Comment on component parts

For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General information

Change powdered clothing.

Inhalation

Ensure supply of fresh air.  
In the event of symptoms seek medical treatment.

Skin contact

In case of contact with skin wash off immediately with soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

Ingestion

Seek medical advice immediately.

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

Irritant effects  
Allergic reactions

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

Treat symptomatically.  
Forward this sheet to your doctor.

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

Extinguishing media that must not be used

Full water jet

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

Risk of formation of toxic pyrolysis products.

#### 5.3 Advice for firefighters

Use self-contained breathing apparatus.  
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

## 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

## 6.3 Methods and material for containment and cleaning up

Take up mechanically.

Avoid raising dust.

Dispose of absorbed material in accordance within the regulations.

## 6.4 Reference to other sections

See SECTION 8+13

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

The normal safety precautions for handling chemicals must be observed.

Avoid the formation and deposition of dust.

Provide vacuuming if dust raised.

Wash hands before breaks and after work.

Use barrier skin cream.

Do not eat, drink, smoke or take drugs at work.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep in a cool place. Store in a dry place.

## 7.3 Specific end use(s)

See product use, SECTION 1.2

# SECTION 8: Exposure controls / personal protection

## 8.1 Control parameters

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

### DNEL

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
Industrial, inhalative, Long-term - systemic effects, 0,349 mg/m³
Industrial, dermal, Long-term - systemic effects, 1 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0,087 mg/m³
general population, dermal, Long-term - systemic effects, 0,5 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,025 mg/kg bw/day
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
There are no DNEL values established for the substance.

### PNEC

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
freshwater, 0,1 mg/L
seawater, 0,01 mg/L
sediment (freshwater), 758 µg/kg sediment dw
sediment (seawater), 75,8 µg/kg sediment dw
soil, 563,6 µg/kg soil dw
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
There are no PNEC values established for the substance.

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	0,4 mm; butyl rubber, > 120 min (EN 374) The details concerned are recommendations. Please contact the glove supplier for further information.
<b>Skin protection</b>	Protective clothing (EN 340)
<b>Other</b>	Avoid contact with eyes and skin. Do not inhale dust. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact during pregnancy/ while nursing.
<b>Respiratory protection</b>	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter P2. (DIN EN 143)
<b>Thermal hazards</b>	none
<b>Delimitation and monitoring of the environmental exposition</b>	Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	solid
<b>Form</b>	powder
<b>Color</b>	violet
<b>Odor</b>	odourless
<b>Odour threshold</b>	not applicable
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not determined
<b>Boiling point or initial boiling point and boiling range [°C]</b>	not applicable
<b>Flash point [°C]</b>	not applicable
<b>Flammability</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Oxidising properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	not applicable
<b>Density [g/cm³]</b>	1,71 (CAS 15137-09-4))
<b>Relative density</b>	not determined
<b>Bulk density [kg/m³]</b>	not determined
<b>Solubility in water</b>	partially soluble
<b>Solubility other solvents</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	not applicable
<b>Kinematic viscosity</b>	not applicable
<b>Relative vapour density</b>	not applicable
<b>Melting point [°C]</b>	not determined
<b>Auto-ignition temperature [°C]</b>	not applicable
<b>Decomposition temperature [°C]</b>	178,47 (CAS 15137-09-4))
<b>Particle characteristics</b>	No information available.

### 9.2 Other information

none

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

No dangerous reactions known if used as directed.

### **10.2 Chemical stability**

The product is stable under standard conditions.

### **10.3 Possibility of hazardous reactions**

No hazardous reactions known.

### **10.4 Conditions to avoid**

See SECTION 7.2.

### **10.5 Incompatible materials**

not relevant

### **10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity

Product
ATE-mix, oral, 300 -2000 mg/kg
Substance
cobalt diammonium edta, CAS: 94233-08-6
LD50, oral, Rat, 712 mg/kg
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
LD50, oral, Rat, 729 mg/kg
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
LD50, oral, Rat, 729 mg/kg, read-across,

#### Acute dermal toxicity

Product
dermal, Based on the available information, the classification criteria are not fulfilled.

#### Acute inhalational toxicity

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.

#### Serious eye damage/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
Rabbit (eye), (EDTA Disodium), OECD 405, Slight irritant effect - does not require labelling.
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
Eye, Rabbit, OECD 405, non-irritating, read-across,

#### Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
Human, (10% EDTA cream), non-irritating
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
dermal, Reconstituted human epidermis model, OECD 404, non-irritating, read-across,

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

Based on the available information, the classification criteria are fulfilled.

Calculation method

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
dermal, Guinea pig, (Cobalt sulphate), OECD 406, sensitising
dermal, Guinea pig, (EDTA trisodium salt, 10%), non-sensitizing
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
dermal, Guinea pig, OECD 406, sensitising, read-across,

#### Specific target organ toxicity — single exposure

Based on the available information, the classification criteria are not fulfilled.

#### Specific target organ toxicity — repeated exposure

Based on the available information, the classification criteria are not fulfilled.

#### Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
Cobalt disodium ethylenediaminetetraacetate, CAS: 15137-09-4
in vitro, negativ

cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
in vitro, no adverse effect observed, read-across,

<b>Reproduction toxicity</b>	Based on the available information, the classification criteria are not fulfilled.
<b>Carcinogenicity</b>	Based on the available information, the classification criteria are not fulfilled.
<b>Aspiration hazard</b>	Based on the available information, the classification criteria are not fulfilled.
<b>General remarks</b>	

Toxicological data of complete product are not available.

## 11.2 Information on other hazards

<b>11.2.1 Endocrine disrupting properties</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>11.2.2 Other information</b>	none

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
cobalt diammonium edta, CAS: 94233-08-6
EC50, (24h), Ceriodaphnia dubia, 15 mg/L
cobalt(2+) dihydrogen 2,2',2'',2'''-(ethane-1,2-dinitrilo)tetraacetate, CAS: 24704-41-4
LC50, (48h), Pimephales promelas, 2,3 mg/L

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

not applicable

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

not applicable

### 12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

For recycling, consult manufacturer.

#### Waste no. (recommended)

060313\*

#### Contaminated packaging

Uncontaminated packaging may be taken for recycling.

#### Waste no. (recommended)

150102  
150104

## SECTION 14: Transport information

### 14.1 UN number or ID number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

### 14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable



#### 14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Maritime transport in bulk according to IMO instruments

not applicable

### SECTION 15: Regulatory information

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

<b>EEC-REGULATIONS</b>	2008/98/EG (2000/532/EC ); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 2024/573; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances $\geq 0.1\%$ that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains $\geq 0.1\%$ of substances with the following restrictions. 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is not subject to any restrictions.
<b>TRANSPORT-REGULATIONS</b>	ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)
<b>NATIONAL REGULATIONS (EU):</b>	
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0%

#### 15.2 Chemical safety assessment

not applicable

### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 3)

H317 May cause an allergic skin reaction.  
H302 Harmful if swallowed.

## 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
ATE = acute toxicity estimate  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
IVIS = In vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
TLV®/TWA = Threshold limit value – time-weighted average  
TLV®STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

## 16.3 Other information

This document does not comply with Regulation (EC) No 1907/2006, article 31 (5) and may be used for internal purposes only.

### Classification procedure

Acute Tox. 4: H302 Harmful if swallowed. (Calculation method)  
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

### Modified position

none

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