

# Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



## Oligo Zinc-EDTA 7.4% Liquid

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

#### 1.1. Product identifier

Trade name: **Van Iperen Oligo Zinc-EDTA 7.4% Liquid**

Substance name: disodium [[N,N'-ethylenediylbis[N-(carboxylatomethyl)glycinato]](4-)-N,N',O,O',ON,ON'] zincate(2-)

IUPAC name: Zinc(2+) ion disodium 2-({2-bis(carboxylatomethyl)amino}ethyl) (carboxylatomethyl) Other names: Ethylenediaminetetraacetic acid, zinc disodium complex

REACH reg.: 01-2119963942-27-0003

CAS: 14025-21-9

EC: 237-865-0

Molecular formula: C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>8</sub>Na<sub>2</sub>Zn

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

Use of the substance/mixture: fertilizer. Uses advised against: not identified.

#### 1.3. Details of the supplier of the safety data sheet

Van Iperen International BV

Smidsweg 24

3273 LK Westmaas - Nederland

T +31 (0) 186 578 888 - F +31 (0) 186 573 452

[info@iperen.com](mailto:info@iperen.com) - [www.vaniperen.com](http://www.vaniperen.com)

#### 1.4. Emergency telephone number

In case of emergency contact the national emergency telephone number: UK and Ireland: 112 or 999

Country	Official advisory body	Address	Emergency number
Ireland (Republic of)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

No hazardous product as specified in EU-GHS/CLP No 1272/2008.

#### 2.2. Label elements

Labelling according to EU-GHS/CLP No 1272/2008 - not required.

#### 2.3. Other hazards

The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the REACH Regulation. (see section 12).

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Trade name: Zn EDTA liquid

Substance name: disodium [[N,N'-ethylenediylbis[N-(carboxylatomethyl)glycinato]](4-)-N,N',O,O',ON,ON'] zincate(2-)

IUPAC name: Zinc(2+) ion disodium 2-({2-bis(carboxylatomethyl)amino}ethyl) (carboxylatomethyl)

Other names: Ethylenediaminetetraacetic acid, zinc disodium complex

REACH reg.: 01-2119963942-27-0003

CAS: 14025-21-9

EC: 237-865-0

Index No: not available

Molecular formula: C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>8</sub>ZnNa<sub>2</sub>

#### 3.2. Mixtures – not concern

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General advice: The first step is to put the injured person from a contaminated environment.

If swallowed:

1. Rinse mouth, give 2-3 glasses of water to drink. Seek medical attention. Induce vomiting. Never give anything by mouth to an unconscious person.

2. Until transporting the patient to the hospital to ensure peace, lying and warm.

In case of eye contact:

1. Rinse thoroughly with plenty of cold water.

2. Seek medical attention.

In case of skin contact:

1. Rinse off with plenty of water. Remove contaminated cloths.

2. If symptoms persist, seek medical attention.

# Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



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If inhaled

1. Move to fresh air. If needed, seek medical attention.

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

The most important known symptoms and effects are described in section 2.

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

Treatment: Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Depending on the materials stored in the neighbourhood use following extinguishing media: foam, water spray, dry chemical powder, CO<sub>2</sub>.  
Unsuitable extinguishing media: none known.

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

Hazardous decomposition / combustion products: produces oxides of nitrogen on combustion: NyOx,

### 5.3. Advice for firefighters

Fire-fighters should wear suitable protective clothing such as boots, overalls, gloves, eye and face protection and breathing apparatus. Do not allow to enter fire-fighting water to surface water or groundwater.

## SECTION 6: Accidental release measures

General advice: Do not flush into public water courses. Do not empty into drains, ground or surface water and soil. If the product enters drains or water, immediately inform appropriate authorities.

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

Ensure adequate ventilation. Use personal protective equipment – see section 8.

### 6.2. Environmental precautions

Do not let product enter drains. If the product enters drains or water, immediately inform appropriate authorities.

### 6.3. Methods and material for containment and cleaning up

Stop the leak. Collect into a suitable container using sorbent and pass for disposal. After removal, wash the spillage area with water.

### 6.4. Reference to other sections

For disposal see section 13.

For personal protective equipment see section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment according to section 8. Do not disposal to sewage system. Avoid formation of mist/aerosol.

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

Keep in original, tightly closed container in a dry place. Keep away from heat and source of ignition. Recommended storage temperature: -10oC till + 30oC.

### 7.3. Specific end use(s)

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

According to the country-specific regulations.

DNEL:

Workers - Hazard via inhalation route (long term exposure, systemic effect) – 30 mg/m<sup>3</sup>

Workers - Hazard via inhalation route (acute/short term exposure, systemic effect) – Low hazard (no threshold derived)

Workers - Hazard via inhalation route (acute/short term exposure, local effect) – 10 mg/ m<sup>3</sup> Workers - Hazard via dermal route (long term exposure, systemic effect) - 62 500 mg/kg bw/day General Population - Hazard via inhalation route (long term exposure, systemic effect) – 7,5 mg/m<sup>3</sup>

General Population - Hazard via dermal route (long term exposure, systemic effect) - 31 250 mg/kg bw/day

General Population - Hazard via oral route (long term exposure, systemic effect) - 6,25 mg/kg bw/day

PNEC:

PNEC aqua (freshwater) – 2,97 mg/L PNEC aqua (marine water) - 0.3 mg/L

PNEC aqua (intermittent releases) - 1.1 mg/L PNEC STP - 66 mg/L

Sediment (freshwater) - No exposure of sediment expected Sediment (marine water) - No exposure of sediment expected AIR - No hazard identified

# Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



## Oligo Zinc-EDTA 7.4% Liquid

PNEC soil – 0,21 mg/kg soil dw

### 8.2. Exposure controls

Personal protective equipment:

Eye/face protection

Use safety goggles

Skin/hands protection

Handle with protective gloves (recommended nitrile gloves, layer thickness 0,11 mm and breakthrough time > 480 minutes). Use protective clothing.

Industrial hygiene: Handle in accordance with good industrial hygiene and safety practice. Change contaminated clothing. Avoid contact with skin.

Avoid breathing mist/aerosol. Wash hands after working with product. When using do not eat or drink. Immediately remove spilled substance.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance/ Colour	Solution, greyish
Odour	Odourless
Odour threshold	Not applicable
pH value 1,0 % (w/v) solution	6,0 – 7,0
Melting point/freezing point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable (liquid)
Upper/lower flammability or explosive limits;	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1,35 ± 0.01 g/cm <sup>3</sup>
Solubility(ies)	No data available
Partition coefficient: n-octanol/water	-10.316
Auto-ignition temperature	No data available
Decomposition temperature	starts to decompose at 263°C
Viscosity	No data available
Explosive properties	Not explosive (EU Method A.14)
Oxidizing properties	No oxidizing properties (EU Method A.17)

### 9.2 Other information

Zinc	Zn	10 ± 0,05 % w/v
		7,4 ± 0,05 % w/w
Conductivity 0,1% sol.		290 µS/cm at 20°C

## SECTION 10: Stability and reactivity

### 10.1 Reactivity -

the substance has low chemical reactivity.

### 10.2 Chemical stability –

stable under normal conditions of use and storage.

### 10.3 Possibility of hazardous reactions -

no data available

### 10.4 Conditions to avoid –

keep away from heat.

### 10.5 Incompatible materials –

none.

### 10.6 Hazardous decomposition products –

in the event of fire produces oxides of nitrogen NyOx

## SECTION 11: Toxicological information

Substance name	Method	Results	Unit
Zn EDTA	LD50 (oral, rat, OECD 423)	>2000	mg/kg

Acute toxicity: not harmful

Skin corrosion/irritation - no irritating (OECD Guideline 439 (In Vitro Skin Irritation))

Serious eye damage/eye irritation - slightly irritating in OECD test 437 but does not meet the criteria for classification

Respiratory or skin sensitization - no skin or respiratory sensitization (based on data for other EDTA chelates)

Germ cell mutagenicity – not classified, (based on data for other EDTA chelates)

Carcinogenicity - not classified, (based on data for other EDTA chelates)

# Safety Data Sheet

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Reproductive toxicity – not classified, (based on data for other EDTA chelates)

Specific target organ toxicity (STOT) - single exposure – not classified, (based on data for other EDTA chelates) Specific target organ toxicity (STOT)- repeated exposure - not classified, (based on data for other EDTA chelates)

Aspiration hazard – not applicable (solid)

Potential health effects

No data available.

Signs and Symptoms of Exposure

No data available.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Substance name	% w/w	Method	Results	Unit
Zn EDTA	100	LC50 (fish)	685	mg/l/ 96 h
		EC50 (daphnia)	>100	mg/l/ 48 h

#### 12.2 Persistence and degradability

Zn EDTA is not readily biodegradable according to OECD criteria, but ultimately biodegradable under special environmental conditions (slightly alkaline pH).

#### 12.3 Bioaccumulative potential

The substance has a low potential for bioaccumulation (the log Kow is  $\leq 4,5$ ).

#### 12.4 Mobility in soil

The estimated log Koc values are less than the threshold value of 3, indicating no adsorbing potential for this compound. Additionally, since this compound is mostly negatively charged at relevant environmental pH values, reducing its chances of being adsorbed to soil minerals/humic acids.

#### 12.5 Results of PBT and vPvB assessment

The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the REACH Regulation. Chemical safety assessment not required (not conducted).

#### 12.6 Other adverse effects - no data available

### SECTION 13: Disposal considerations

Packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

### SECTION 14: Transport information

#### 14.1 UN number

Not applicable

#### 14.2 UN proper shipping name

Not applicable

#### 14.3 Transport hazard class(es)

Not applicable

#### 14.4 Packing group

Not applicable

#### 14.5 Environmental hazards

Not applicable

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

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

1. REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC with amendments
2. COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
3. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; with amendments
4. Regulation (EU) No 649/2012 Of The European Parliament and of The Council of 4 July 2012 concerning the export and import of hazardous chemicals.
5. Regulation (EC) No 850/2004 Of The European Parliament and of The Council Of 29 April 2004 On Persistent Organic Pollutants And Amending Directive 79/117/EEC.
6. European Agreement Concerning The International Carriage Of Dangerous Goods By Road (ADR), 2015

15.2. Chemical Safety Assessment

The chemical safety assessment was carried out.

### SECTION 16: Other information

Other information:

To develop this MSDS used results obtained in accordance with the requirements of REACH regulation.

Abbreviation:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

LD50: Lethal Dose 50%. The LD50 corresponds to the dose of a tested substance causing 50% lethality during a specified time interval.

LC50: Lethal Concentration 50%. The LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval.

EC50: Effective Concentration 50%. The EC50 corresponds to the concentration of a tested substance causing 50% changes in response (e.g. on growth) during a specified time interval.

BCF: Bioconcentration factor

PBT: Persistent, bioaccumulative and toxic

vPvB: Very Persistent and very Bioaccumulative

Indication of changes:

Section 15: update the regulatory information, as of May, 2017

### Company disclaimer

*The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any proceed, unless specified in the text.*