

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 Azoren Mix

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

1.1. Product identifier

Trade name: Van Iperen Oligo Azoren Mix

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 - 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

Classification according to Regulation EU-GHS/CLP No 1272/2008.

Rep. 1 B H360FD May damage fertility. May damage the unborn child.

2.2. Label elements

Labelling according to EU-GHS/CLP No 1272/2008



H360DF May damage fertility. May damage the unborn child.

P201 Obtain special instructions before use.

P308 + P313 If exposed or concerned: Get medical advice/attention

P405 Store locked up.

P501 Dispose of contents/ container according to local legislation.

Restricted to professional users.

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 –

not concern

3.2. Mixtures

Hazard substances:

Substance Concentration
boric acid, H3BO3 ≥ 5.5% w/w
in terms of boron 2.5 % w/w

CAS No 10043-35-3

EC No 233-139-2

Index No 005-007-00-2

REACH No 01-2119486683-25-XXXX

Classification according to Regulation 1272/2008 Rep. 1B, H360FD c ≥ 5,5%

Ethylenediaminetetraacetic acid, cooper-disodium complex, Cu EDTA

10% < c < 25% w/w CAS No 14025-15-1

EC No 237-864-5

Index No No available

REACH No 01-2119963944-23-0002

Classification according to Regulation 1272/2008 Acute Tox 4, H302

Eye Irrit. 2, H319

Products also contains not classified substances like physical mixture of EDTA chelates (iron, manganese, zinc) and soluble salt of magnesium and molybdenum.

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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.

If inhaled 1. Unlikely route of exposure due to the form of the product - a non-dusting microgranules. 2. 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, CO₂.

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, eyes 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

Sweep up shovel. Contain spillage and then collect by wet-brushing and place in container for disposal according to local regulations. After removal, wash the contaminated 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 dust.

7.2. Conditions for safe storage, including any incompatibilities

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

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.

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 dust. Wash hands after working with product. When using do not eat or drink. Immediately remove spilled product.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Solid, micro-granular
Colour	White-green
Odour	Odourless
pH value 1,0 % (w/v) solution	6,0 + 0,5
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 flammable
Upper/lower flammability or explosive limits;	Not applicable
Vapour pressure	No data available
Vapour density	No data available
Relative/bulk density	0.7 ± 0.5 g/cm ³
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	No oxidizing properties

9.2 Other information

Nitrogen total	N	5,0% w/w
Magnesium oxide	MgO	1,1% w/w
Boron	B	1,5 % w/w
Copper chelated by EDTA	Cu	0,60 % w/w
Iron	Fe	4,0 % w/w
Manganese chelated by EDTA	Mn	3,0 % w/w
Molybdenum	Mo	0,05 % w/w
Zinc chelated by EDTA	Zn	4,0 % w/w
Conductivity of 0,1% solution		0,34 ± 0,02 mS/cm at 20°C

SECTION 10: Stability and reactivity

10.1 Reactivity -

the mixture 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

There no available toxicological studies for the mixture as such. The assessment was made on the basis of ownership of components of the mixture.

- a) Acute toxicity: not harmful
- b) Skin corrosion/irritation - no irritating
- c) Serious eye damage/eye irritation - no irritating
- d) Respiratory or skin sensitization - no skin or respiratory sensitization
- e) Germ cell mutagenicity - no mutagenic
- f) Carcinogenicity - no carcinogenic
- g) Reproductive toxicity – may damage fertility, may damage the unborn child.
- h) Specific target organ toxicity (STOT) - single exposure – not harmful
- i) Specific target organ toxicity (STOT)- repeated exposure - not harmful
- j) Aspiration hazard – not applicable
- Potential health effects No data available.
- Signs and Symptoms of Exposure No data available.
- Boric acid (H₃BO₃, CAS 10043-35-3) – available toxicological data

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Acute toxicity: not harmful

LD50 (oral) > 2 600 mg/kg bw (rat, OECD 401/EU Method B.1.)

LC50 (inhal.) > 2,03 mg/L powietrza (rat, 4h, OECD 403)

LD50 (dermal) > 2 000 mg/kg bw (rabbit, FIFRA 40 CFR 163)

Skin corrosion/irritation - no irritating, (rabbit, FIFRA (40 CFR 163)

Serious eye damage/eye irritation - no irritating, (rabbit, OECD 405)

Respiratory or skin sensitization - no skin or respiratory sensitization (OECD 406)

Germ cell mutagenicity - no mutagenic

Method OECD 482 – negative

Bacterial Reverse Mutation Assay (OECD 471, *S. typhimurium*) – negative

In vitro mammalian cell gene mutation test (wg. 40 CFR Part 158 US-EPA-FIFRA, Section 156.340) – genotoxicity – negative; cytotoxicity – the results depend on concentration.

Mammalian Erythrocyte Micronucleus Test (OECD Guideline 474) – negative

Carcinogenicity - no carcinogenic (OECD Guideline 451, mouse)

Reproductive toxicity – May damage fertility. Suspected of damaging the unborn child.

NOAEL 34-100 mg/kg bw of boric acid (equivalent 5.9 and 17.5 mg B/kg bw).

Specific target organ toxicity (STOT) - single exposure – not harmful (ASTM E981-04 (2004))

Specific target organ toxicity (STOT)- repeated exposure – not harmful (method similar to OECD 452),

Aspiration hazard – not applicable

CuEDTA – toxicity data

Acute toxicity:

LD50 (oral, rat) 890 mg/kg – harmful if swallowed

LC50 (rat, inhal, 4 h, OECD 436) > 5,32 mg/L

Skin corrosion/irritation – slight irritated, but no classification and labeling was considered to be needed based on the results of this study.

Serious eye damage/eye irritation – irritating according to OECD test No 405

Respiratory or skin sensitization – not sensitising (OECD 429)

Germ cell mutagenicity - The test substance EDTA-CuNa2 is not mutagenic in the Ames test under the experimental conditions used (OECD 471).

Carcinogenicity - conclusive but not sufficient for classification

Reproductive toxicity – conclusive but not sufficient for classification

Specific target organ toxicity (STOT) - single exposure – conclusive but not sufficient for classification

Specific target organ toxicity (STOT)- repeated exposure – conclusive but not sufficient for classification

Aspiration hazard – not applicable (solid substance)

SECTION 12: Ecological information

12.1. Toxicity

There no available ecotoxicological studies for the mixture as such. The assessment was made on the basis of ownership of components of the mixture.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects -

no data available

CuEDTA – ecotoxicity data

Toxicity to aquatic organisms

LC50 (fish, 96h) 555 mg/L

Persistence and degradability

Cu EDTA is not readily biodegradable according to OECD criteria, but ultimately biodegradable under special environmental conditions (slightly alkaline pH). No biodegradation observed in activated sludge simulation test (OECD TG 303 A).

Bioaccumulative potential

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

Mobility in soil The estimated log Koc values are less than the threshold value of 3 indicating no adsorbing potential for this compound. The estimated log Koc for EDTA-CuNa2 is 1 (worst case, MCI method).

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.

Other adverse effects - no data available

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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 and the IBC Code

Not applicable

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
5. 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.
6. 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.
7. European Agreement Concerning The International Carriage Of Dangerous Goods By Road (ADR), 2015

15.2. Chemical Safety Assessment

The chemical safety assessment was not carried out.

SECTION 16: Other information

Other information:

Classification of mixture was carried on based on ingredients of the mixture (Additivity formula)

Abbreviations:

Rep. 1B – Reproductive toxicity category 1B

Acute Tox 4 – acute toxicity category 4

H302 - Harmful if swallowed

Eye Irrit. 2 – eye irritation, category 2

H319 - Causes serious eye irritation.

NOAEL: No Observed Adverse Effect Level

NOEC: No observed 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 law, as of April 20, 2016

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.