



Safety Data Sheet OLIGOMIX (1 KG BAG)

Safety Data Sheet dated 8/2/2023, version 8

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

1.1. Product identifier

Mixture identification:

Trade name: OLIGOMIX (1 KG BAG)

Trade code: 37804

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

Recommended use:

Professional use.

Fertilizer for agricultural use

Uses advised against:

The pertinent uses are listed above, other uses are not recommended

1.3. Details of the supplier of the safety data sheet

Company:

ALBA MILAGRO International spa

Via F. Corridoni 19 20015 Parabiago (MI) Italy

Ph. +39 0331495211

Competent person responsible for the safety data sheet:

reach@albamilagro.com

1.4. Emergency telephone number

Emergency telephone number of the company and/or of an authorised advisory centre (Monday to

Friday from 8.30-12.30 and 13.30 to 17.30):

Ph. +39 0331495211

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

☠ Danger, Repr. 1B, May damage fertility or the unborn child.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H360 May damage fertility or the unborn child.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P202 Do not handle until all safety precautions have been read and understood.

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

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

P405 Store locked up.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

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None
Contains
boric acid
Special provisions according to Annex XVII of REACH and subsequent amendments:
Restricted to professional users.

2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 5\%$ - $< 7\%$	boric acid	Index number: CAS: EC: REACH No.: 005-007-00-2 10043-35-3 233-139-2 01- 2119486683 -25	 3.7/1B Repr. 1B H360FD

SVHC, PBT, vPvB, endocrine disruptor substances:
 $\geq 5\%$ - $< 7\%$ boric acid
REACH No.: 01-2119486683-25, Index number: 005-007-00-2, CAS: 10043-35-3, EC:
233-139-2
SVHC

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash with plenty of water and soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or

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safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

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None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

boric acid - CAS: 10043-35-3

OSHA - TWA: 15 mg/m³

OSHA - TWA: 5 mg/m³

ACGIH - TWA(8h): 2 mg/m³ - STEL: 6 mg/m³ - Notes: (I), A4 - URT irr

DNEL Exposure Limit Values

boric acid - CAS: 10043-35-3

Worker Professional: 8.3 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: (1,45 mg B/m³)

Worker Professional: 27460 mg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: (4800 mg B/24 h)

Consumer: 0.98 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: (0,17 mg B/kg peso corporeo/24 h)

Consumer: 4.15 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: (0,73 mg B/m³)

Consumer: 196 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: esterna (34,3 mg B/kg peso corporeo/24 h)

Consumer: 0.98 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: (0,17 mg B/peso corporeo/24 h)

PNEC Exposure Limit Values

boric acid - CAS: 10043-35-3

Target: Marine water - Value: 1.35 mg/l

Target: Fresh Water - Value: 1.35 mg/l

Target: Intermittent - Value: 9.1 mg/l

Target: Marine water sediments - Value: 1.8 mg/kg dw

Target: Freshwater sediments - Value: 1.8 mg/kg dw

Target: STP - Value: 1.75 mg/l

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Properties	Value	Method:	Notes
Physical state:	Solid	--	--
Colour:	N.A.	--	--
Odour:	None	--	--
Odour threshold:	Not Relevant	--	--
Melting point/freezing point:	n.d.	--	--
Boiling point or initial boiling point and boiling range:	Not Relevant	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	n.d.	--	--
Flash point:	n.a. ° C	--	--
Auto-ignition temperature:	n.a.	--	--
Decomposition temperature:	n.d.	--	--
pH:		--	(1% solution)
Kinematic viscosity:	N.A.	--	--
Solubility in water:	130-150 g/L	--	--
Solubility in oil:	n.d.	--	--
Partition coefficient n-octanol/water (log value):	n.d.	--	--
Vapour pressure:	n.d.	--	--
Density and/or relative density:	n.d.	--	--
Relative vapour density:	n.d.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

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Properties	Value	Method:	Notes
Explosive properties:	n.d.	--	--
Evaporation rate:	n.d.	--	--
Miscibility:	n.d.	--	--
Conductivity:	n.d.	--	--
Viscosity:	Not Relevant	--	--
Oxidizing properties:	n.d.	--	--
Fat Solubility:	n.d.	--	--
Substance Groups relevant properties	n.d.	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

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

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

boric acid - CAS: 10043-35-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3450 mg/kg - Source: (Sprague-Dawley) - Notes: ratto maschio (acido borico)

Test: LD50 - Route: Oral - Species: Rat = 4080 mg/kg - Source: (Sprague-Dawley) - Notes: ratto femmina (acido borico)

Test: LD50 - Route: Oral - Species: Rat > 2600 mg/kg - Source: OECD Guideline 401 - Notes: (triossido di boro)

Test: LC50 - Route: Inhalation - Species: Rat > 2.03 mg/L - Source: OECD Guideline 403 - Notes: (acido borico)

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: FIFRA (40 CFR 163) - Notes: (acido borico)

b) skin corrosion/irritation:

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- Test: Skin Irritant - Route: Skin - Species: Rabbit Negative
- c) serious eye damage/irritation:
Test: Eye Irritant - Route: SOLUTION - Species: Rabbit Negative - Source: FIFRA (40 CFR 162) TSCA (40 CFR 798) - Notes: OECD Guideline 405
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative
- e) germ cell mutagenicity:
Test: Mutagenesis - Species: Salmonella Typhimurium Negative - Source: OECD Guideline 471
- f) carcinogenicity:
Test: Carcinogenicity - Species: Mouse Negative - Source: OECD Guideline 451

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

- a) acute toxicity;
 - b) skin corrosion/irritation;
 - c) serious eye damage/irritation;
 - d) respiratory or skin sensitisation;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.
- 11.2. Information on other hazards
- Endocrine disrupting properties:
No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

boric acid - CAS: 10043-35-3

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 24 mg/L - Duration h: 96 - Notes: Scenedesmus subspicatus

Endpoint: LC50 - Species: Daphnia = 133 mg/L - Duration h: 48 - Notes: 21 gg:

NOEC-LOEC= 6-13 mgB/L

Endpoint: LC50 - Species: Fish = 74 mg/L - Duration h: 96 - Notes: Limanda limanda

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish = 11.2 mg/L - Notes: 32-d NOEC=11,2 mg B/L

Endpoint: LOEC - Species: Fish = 23 mg/L - Notes: 32 d LOEC=23 mg B/L

Endpoint: EC50 - Species: Daphnia = 34 mg/L - Notes: 21-d=34 mg B/L

Endpoint: LOEC - Species: Daphnia = 56 mg/L - Notes: 21-d LOEC=56 mg B/L

Endpoint: NOEC - Species: Algae > 100 mg/L - Notes: 10-d NOEC> 100 mg B/L Agmenellum quadruplicatum

e) Plant toxicity:

Endpoint: NOEC = 56 mg/kg - Notes: 7-d NOEC=56 mg B/kg suolo Allium cepa

f) Effects in sewage plants:

Endpoint: EC50 > 17.5 mg/kg - Notes: 102-d EC50>17.5 mgB/kg suolo peso giornaliero

12.2. Persistence and degradability

None

N.A.

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- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
N.A.
- 14.6. Special precautions for user
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) n. 2020/878
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 - Regulation (EU) n. 2017/776 (ATP 10 CLP)
 - Regulation (EU) n. 2018/669 (ATP 11 CLP)
 - Regulation (EU) n. 2018/1480 (ATP 13 CLP)
 - Regulation (EU) n. 2019/521 (ATP 12 CLP)

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Regulation (EU) n. 2020/217 (ATP 14 CLP)
 Regulation (EU) n. 2020/1182 (ATP 15 CLP)
 Regulation (EU) n. 2021/643 (ATP 16 CLP)
 Regulation (EU) n. 2021/849 (ATP 17 CLP)
 Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
 Regulation (EC) nr 648/2004 (detergents).
 Dir. 2004/42/EC (VOC directive)

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

boric acid
 Toxic to reproduction

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
 None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H360FD May damage fertility. May damage the unborn child.

Hazard class and hazard category	Code	Description
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Repr. 1B, H360	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the

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specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.