

VALAGRO Safety Sheet
Date: 17/09/2021 Rev. 1.1
Product: 0968
Code: Boroplus
Print Date: September 17, 2021

SAFETY SHEET

Boroplus

SECTION 1: IDENTIFICATION

1.1. Product Identifier used on the label

Substance identification:

Chemical name: Orthoboric acid, compound with 2-aminoethanol

Número EC: 701-024-0

Trade name: Boroplus

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

Recommended use:

Fertilizer

1.3. Details of the supplier of the safety data sheet

AGRITRADE

1 Robin Mann Place

Christchurch Airport

Christchurch 8053

New Zealand

Ph 03 341 4587

Fax 03 341 4584

Free Phone 0800 333 855

agritrade@nzagritrade.co.nz

1.4. Emergency telephone number:

Emergency number : 24 Hour Emergency Contact: 0800 CHEMCALL (0800 243622)

NZ POISON CENTRE : 111 Police, Ambulance and Fire Brigade (available in New
CONTACT Zealand only)
0800 764 766 (National Poisons Information Centre)

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to the Hazardous Substances (Classification) Notice 2020, New Zealand:

The product is not classified as hazardous

Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200):

The product is not classified as dangerous

EC regulation criteria 1272/2008 (CLP):

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

None

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- 2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1. Substances
Orthoboric acid, compound with 2-aminoethanol
Numero EC: 701-024-0

SECTION 4: First aid measures

- 4.1. Description of first aid measures
In case of skin contact:
Wash with plenty of water and soap.
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
Inhalation:
The inhalation of the product is unlikely under normal working conditions;
Eyes and skin:
May cause irritation to skin and eyes according to the contact time with the product
Ingestion:
may cause irritation to the gastrointestinal tract
- 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 safety data sheet if possible).
Treatment:
In case of incident seek medical advice showing the safety data sheet

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.
- 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.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training

Wear protective clothes giving a total skin protection, gloves and safety glasses.

Keep away from the affected area people not involved in the emergency intervention.

Ensure adequate ventilation.

Alert the internal emergency team.

For emergency responders:

Wear protective clothes giving a total skin protection, gloves and safety glasses.

See protective measures under point 7 and 8.

Remove people to safety.

6.2. Environmental precautions

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

Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer.

In case of seepage into waterways, soil or sewage system inform authorities responsible.

Material suitable for collecting: absorbent material, soil, sand

Collect the product absorbed for example using shovel and broom

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

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

Collect the product absorbed for example using shovel and broom

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.

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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

Oxidizing and reducing agents

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

8.2. Exposure controls

The personal protective equipment must be compliant to the regulation UNI –EN in force

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Eye protection:

Wear safety glasses according to the standard EN 166, don't use contact lenses..

Protection for skin:

Use clothing that provides comprehensive protection to the skin

Protection for hands:

Wear PVC (polyvinyl chloride) gloves according to the standard EN 374

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

N.A.

Environmental exposure controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Yellow liquid
Odour:	N.A.
Odour threshold:	N.A.
pH at 20°C:	7.7
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Density:	1,4 Kg/dm ³ at 20°C
Solubility in water:	soluble
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of handling and storage.

10.2. Chemical stability

Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions

N.A.

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- 10.4. Conditions to avoid
Stable under normal conditions.
Avoid high temperatures
- 10.5. Incompatible materials
Oxidizing and reducing agents
- 10.6. Hazardous decomposition products
Monoethanolamine and boric acid.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Orthoboric acid, compound with 2-aminoethanol; Nr. CAS: 26038-87-9
- a) acute toxicity:
LD50/LC50:
Dermal, Rat
Value: > 2000 mg/kg
Dermal, Pig
Value: <2000 mg/kg
LD50
Oral, Rat
Value > 2000 mg/kg
NOAEL (oral toxicity, repeated dose)
Oral, Rat ,28 days
Value: = 1000 mg/kg
- b) skin corrosion / irritation;
Rabbits (New Zealand White): non-irritating, (1993).
- c) serious eye damage / eye irritation;
Rabbits (New Zealand White): moderately irritating, 1998
- d) respiratory or skin sensitization
Sensitization: (Guinea Pig): negative
- e) germ cell mutagenicity;
Mammalian chromosome aberration test: Negative.
- f) carcinogenicity;
Mammalian chromosome aberration test: Negative.
- g) Not classified as carcinogenic reproductive toxicity;
Mammalian chromosome aberration test: Negative.
- h) Specific target organ toxicity (STOT) - single exposure;
N.A.
- i) Specific target organ toxicity (STOT) - repeated exposure;
N.A.
- j) Aspiration hazard.
N.A.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Orthoboric acid, compound with 2-aminoethanol; Nr. CAS: 26038-87-9
- aquatic toxicity
EC50 24 h
Daphnia magna
Value > 1000 mg / l

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EC50 48 h

Daphnia magna

Value = 496 mg / l

EC50 72 h

Alga Pseudokirchneriella subcapitata

Value = 26 mg / l

IC50 3 h

aquatic microorganisms, activated sludge

Value > 100 mg / l

LC50 3 h

Fish Brachydanio rerio

Value ≥ 100 mg / l

LC50 96 h

Fish Cyprinus carpio

Value = 617 mg / l

12.2. Persistence and degradability

The product contains biodegradable organic substance

Biodegradation 28 Days

Value ca. 73%

Biodegradazione 10 days

Value > 60%

Readily biodegradable.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

The product is soluble and mobile in both terrestrial and aquatic compartments

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product: Recover if possible. Operate according to local and national.

Contact local authorities who will provide guidance regarding the disposal of special waste.

- Packaging: Dispose according to current regulations

SECTION 14: Transport information

14.1. UN 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

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

14.6. Special precautions for user

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N.A.
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
N.A.

SECTION 15: Regulatory information

New Zealand

Classification : Classified as non-hazardous according to Hazardous Substances (Classification) Notice 2020, New Zealand

USA -Regulations

Hazard Communication Standard (HCS) Haz Com 2012
OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.
Hazard Communication Standard
United Nations Recommendations on the Transport of Dangerous Goods.
OSHA Permissible Exposure Limit
[29 CFR 1926.55 Appendix A](#)
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV)
National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL)
Chemical Abstracts Service (CAS) Registry Number

EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list

SECTION 16: Other information

Issue date: September 17, 2021
This document was prepared by a competent person who has received appropriate training. 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 specific use intended.
This SDS cancels and replaces any preceding release.

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

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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.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.
N.A.:	No data available