

VALAGRO SDS

Date: October 22, 2020 version number: 1.0

Product: Master 19-19-19

Code: 2518

Print Date: 22/10/2020

SAFETY DATA SHEET

MASTER 19-19-19

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

1.1. Product identifier

Mixture identification:

Trade name: Master 19-19-19

Trade code: 2518

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

Produced and packed by:

VALAGRO Spa

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Competent person responsible for the safety data sheet:

regulatory@valagro.com

1.4. Emergency telephone number:

Valagro USA Inc Phone +1-786-230-1020 / +1-786-230-1019

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The product is not classified as dangerous

2.2. Label elements

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

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

2.3. Other hazards

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vPvB Substances: None - PBT Substances: None

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 OSHA Hazard Communication Standard (29 CFR 1910.1200) and CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 0.1% - < 0.25%	boric acid	Index number: 005-007-00-2 CAS: 10043-35-3 EC: 233-139-2	 3.7/1B Repr. 1B H360FD

SVHC Substances:

>= 0.1% - < 0.25% boric acid

Index number: 005-007-00-2, CAS: 10043-35-3, EC: 233-139-2

C>= 5.5% Repr. 1B, May damage fertility or the unborn child.

For full text of H-statements: see SECTION 16

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:

Never give anything by mouth to an unconscious person; If person is conscious rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. 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:

Possible irritation of respiratory tract

Skin:

Possible irritation according to the contact time with the product

Eye:

Possible irritation according to the contact time with the product

Ingestion:

Possible irritation of mouth and digestive tract.

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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:N.A.

SECTION 5: Firefighting measures

5.1. Suitable (and unsuitable) extinguishing media.

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces smoke containing nitrogen oxides, phosphorous oxides.

5.3. Special protective equipment and precautions for fire-fighters.

Use suitable breathing apparatus, protective clothing, eye protection and gloves resistant to chemicals according to EN469

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

See protective measures under point 7 and 8.

Ensure adequate ventilation, move people in a safe place.

Avoid dust generation

6.2. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

Avoid raising dust

Wash with plenty of water and adsorb with inert material or sand; collect the product absorbed for example using shovel and broom

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 gas escape or 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.

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.

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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 in the original package in a cool well-ventilated place, away from sources of heat

Keep away from food, drink and feed.

Incompatible materials:

Acids, Bases, oxidizing and reducing agents, combustible materials.

Instructions as regards storage premises:

Adequately ventilated premises.

Avoid dust generation.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available for the mixture.

Boric acid - CAS: 10043-35-3

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 val.03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 392 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.98 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 4.15 val.03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 196 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

boric acid - CAS: 10043-35-3

Target: Marine water - Value: 2.9 mg/l - Notes: (Boron)

Target: Fresh Water - Value: 2.9 mg/l - Notes: (Boron)

Target: Intermittent release - Value: 13.7 mg/l - Notes: (Boron)

Target: Soil (agricultural) - Value: 5.7 mg/kg - Notes: (Boron)

Target: Sewage treatment plants - Value: 10 mg/l - Notes: (Boron)

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles according to the standard EN 166, 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. nitrile according to EN 374

Respiratory protection:

No need for normal use.

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In case of dust generation, use anti-powder mask with P2 (FFP2) filters according to the EN 149:2001

The powder exposition limit must be respected.

Thermal Hazards:

None Known

Environmental exposure controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Blu powder/crystals
Odour:	Characteristic
Odour threshold:	N.A.
pH 1 % a 20°C:	4.7
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.
Apparent density:	1 – 1.1 Kg/dm ³
Solubility in water a 20°C:	400 g/l
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

110.1. Reactivity

Stable under normal conditions of storage and use

10.2. Chemical stability

Stable under normal conditions of storage and use

10.3. Possibility of hazardous reactions

The product itself is not combustible but it can support the combustion of combustible materials even in the absence of air.

The product may intensify fire.

10.4. Conditions to avoid

At high temperatures, which induce thermal decomposition, the product may release hazardous gases.

10.5. Incompatible materials

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Acids, Bases, oxidizing and reducing agents, combustible materials.

10.6. Hazardous decomposition products

In case of fire and high temperatures can develop nitrogen oxides, phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

In case of ingestion of large amounts, NO₃-ions contained in the product can oxidize the iron atoms in hemoglobin making it unable to carry oxygen effectively to the tissues (methemoglobinemia)

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

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 > 2600 mg/kg - Source: OECD 401 - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met

Test: LC50 - Route: Inhalation - Species: Rat > 2.03 mg/l - Source: OECD 403 - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met

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- Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: FIFRA (40 CFR 163) - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met
- c) serious eye damage/irritation:
Test: Eye Corrosive - Route: 18202.val1 - Species: Rabbit - Source: OECD 405 - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Oral - Species: Guinea pig - Source: OECD 406 - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met
- e) germ cell mutagenicity:
Test: Mutagenesis - Source: Ames test OECD 471 - Notes: Test material: Boric acid - Based on calculation method, the classification criteria are not met
- f) carcinogenicity:
Test: Carcinogenicity - Route: Oral - Species: Mouse - Source: OECD 451 - Notes: Test material: Boric acid - Based on available data, the classification criteria are not met
- g) reproductive toxicity:
Test: Reproductive Toxicity - Route: Oral - Species: Rat = 58.5 mg/kg - Source: (Boron) - Notes: Test material: Borax deca hydrate; Classification as Repr 1B H360FD
- h) STOT-single exposure:
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure:
Based on available data, the classification criteria are not met
- j) aspiration hazard:
Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Ecotoxicity

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: LC50 - Species: Fish = 79.9 mg/l - Duration h: 96 - Notes: (Boron)

Endpoint: LC50 - Species: Daphnia = 133 mg/l - Duration h: 48 - Notes: (Boron)

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish = 11.2 mg/l - Duration h: 768 - Notes: (Boron)

Endpoint: NOEC - Species: Daphnia = 25.9 mg/l - Duration h: 48 - Notes: (Boron)

c) Bacteria toxicity:

Endpoint: NOEC - Species: Microorganisms = 17.5 mg/l - Duration h: 3 - Notes: (Boron)

e) Plant toxicity:

Endpoint: EC50 - Species: Algae = 40 mg/l - Duration h: 72 - Notes: (Boron)

12.2. Persistence and degradability:

No data available for the mixture;

12.3. Bioaccumulative potential

The product does not contain any bioaccumulative substances

12.4. Mobility in soil

No data available for the mixture;

12.5. Other adverse effects (such as hazardous to the ozone layer).

None known

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SECTION 13: Disposal considerations

- 13.1. Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:
- Product :Recover if possible. In so doing, comply with the local and national regulations currently in force.
 - Packaging: Dispose according to 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-Enviromental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N.A.
-

SECTION 15: Regulatory information

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
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)

SECTION 16: Other information

SDS Rev. 1.0 - October 22, 2020
Text of phrases referred to under heading 3:
H360FD May damage fertility. May damage the unborn child
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

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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 MSDS 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.
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