
VALAGRO SDS

Date: January 23, 2020 Rev.1.0

Product: Master Supreme Development

Code: 12541

Print Date: January 23, 2020

SAFETY DATA SHEET

Master Supreme Development

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

1.1. Product identifier

Mixture identification:

Trade name: Master Supreme Development

Trade code: 12541

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

Via Cagliari, 1 Zona Industriale

66041 Atessa (CH) ITALY

Tel. (+39) 08728811 Fax (+39) 0872881382

www.valagro.com

Distributed and guaranteed by:

Campbells Fertilisers Australasia

18 Raymond Road, Laverton North, Victoria, 3026

Phone: (03) 9931 2211

Fax: (03) 9931 2201

www.campbellsfert.com.au

Competent person responsible for the safety data sheet:

regulatory@valagro.com

1.4. Emergency telephone number

Poison Information Centre - Telephone: 131126 (Australia wide – 24HRS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand:

The product is not classified as dangerous

2.2. Label elements

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

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

N.A.

3.2. Mixtures:

Name	Product identifier	%	Approval Status (NZIoC)
Boric acid	CAS:10043-35-3 EC: 10043-35-3	>= 0.1% - < 0.25%	HSNO Approval Code HSR002995

SVHC Substances:

>= 0.1% - < 0.25% boric acid

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

Substance SVHC

Hazard Classification: 3.7/1B Repr. 1B H360FD_Specific concentration limit >= 5.5%

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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 thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

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

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Ingestion:

Possible irritation of mouth and digestive 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:

N.A.

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 containing nitrogen oxides, phosphorous oxides, sulfur oxides.

5.3. Advice for firefighters

Wear suitable personal protective equipment and self-contained 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.

Protective clothing for firefighters (full protective suit, helmet, gloves, boots) must conform to the standard EN469

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, safety glasses and mask with filter P2

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

Ensure adequate ventilation, move people in a safe place.

Alert the internal emergency team.

- For emergency responders:

Wear protective clothes giving a total skin protection, gloves, safety glasses and mask with filter P2.

Ensure adequate ventilation, move people in a safe place.

See protective measures under point 7 and 8.

Avoid dust generation

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 landfill approved;

If possible, collect in clean plastic containers labeled and reuse as fertilizer.

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

Suitable material for taking up: inert absorbing material, soil, sand.

6.3. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

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Avoid raising dust

Wash with plenty of water, contain the spill with absorbent material, earth, sand.

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 in original containers tightly closed in a well-ventilated place far from humidity and heat source

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.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

For dust, in general:

ACGIH (2003) : recommended value inhalable dust: TLV/TWA: 10 mg/m³

ACGIH (2003) : recommended value breathable dust: TLV/TWA: 3 mg/m³

- Boric acid - CAS: 10043-35-3

OSHA / PEL (permissible exposure levels): 15 mg/m³ (total dust) and 5 mg/m³ (breathable dust).

DNELs (Derived No Effect Levels) for workers:

Worker-DNEL long-term inhalation, systemic = 8.3 mg/m³ (1.45 mg B/m³).

Worker-DNEL long-term, skin, systemic = 27460 mg/day (B 4800 mg/day).

DNELs (Derived No Effect Levels) for population (consumers):

DNEL long-term, oral, systemic = 0.98 mg/kg body weight/day (0.17 mg B/kg body weight / day).

DNEL long-term inhalation, systemic = 4.15 mg/m³ (0.73 mg B/m³).

DNEL long-term dermal, systemic (external) = 196 mg/kg body weight/day (34.3 mg B/kg body weight/day).

DNEL long-term dermal, systemic = 0.98 mg/kg body weight/day (0.17 mg B/kg body weight/day).

PNECs (Predicted No Effect Concentrations):

PNECadd, water = 2.02 mg B/L (fresh water and sea water) and 13.7 mg B/L (water with intermittent releases).

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PNECadd, sediment = No exposure expected.

PNECadd, soil = 5.4 mg B/kg soil weight daily.

PNEC STP (industrial waste water) = 10 mg B/L.

8.2. Exposure controls

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

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 nitrile gloves that provides comprehensive protection according to EN 374.

Respiratory protection:

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

The powder exposition limit must be respected

Thermal Hazards:

None

Environmental exposure controls:

Prevent the contamination of soil, surface water or groundwater

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance and colour: Red powder/crystals

Odour: odorless

Odour threshold: not applicable

pH 1% at 20°C: 5.6

Melting point / freezing point: not applicable, solid

Initial boiling point and boiling range: not applicable, solid

Flash point: not applicable, solid

Evaporation rate: not applicable, solid

Solid/gas flammability: not applicable, the product doesn't contain any flammable substance

Upper/lower flammability or explosive limits: not applicable, the product doesn't contain any flammable or explosive substance

Vapour pressure: not applicable, solid

Vapour density: not applicable, solid

Apparent Density: 1,0 Kg/dm³

Solubility in water: 100 g/l at 20 °C

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: not applicable, solid

Explosive properties: not applicable, the product doesn't contain any explosive substance

Oxidizing properties: not applicable, the product doesn't contain any oxidizing substance

9.2. Other information

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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 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

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, sulfur 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

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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

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. Toxicity

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

boric acid - CAS: 10043-35-3

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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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

IMDG-Marine pollutant: No

14.6. Special Precautions for User

N.A.

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

N.A.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

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15.1.2. National regulations**New Zealand**

Classification : Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

National Chemical Inventories (NZIoC) : All components are listed on the New Zealand Inventory of Chemicals

HSNO Approval Number (Group Standard) : HSR002571. Fertiliser (Subsidiary Hazard) Group Standard 2006

15.2. Chemical safety assessment

No

SECTION 16: Other information

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

CCNL - Appendix 1

Insert further consulted bibliography

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.

Paragraphs modified from previous version: all paragraphs

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.

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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