

Valagro S.p.A.

Zona Ind.le 66040 ATESSA (Ch) ITALIA
tel. (+39)0872 881.1 Fax (+39)0872 897416
www.valagro.com info@valagro.com



Responsible Care
L'impegno dell'industria chimica
per l'ambiente
la sicurezza la salute

COMPANY WITH
ENVIRONMENTAL MANAGEMENT
SYSTEM CERTIFIED BY DNV
ISO 14001

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001/2000



Printed 18/05/10

Issued

31/01/2008

Revision 1 (18/05/2010)

SAFETY DATA SHEET
(According to Regulation EC n° 1907/2006 REACH)

1 – IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY/UNDERTAKING

| | |
|---|---|
| 1.1 Identification of the substance | AXILO BMZ |
| 1.2 Intended use | Agriculture fertilizer |
| 1.3 Identification of the company/undertaking | VALAGRO Spa Zona Industriale 66041 ATESSA (CHIETI) ITALY Tel. (+39) 0872 8811 Fax (+39) 0872 881382 Email : regulatory@valagro.com |
| 1.4 Emergency telephone | Tel. (+39) 0872 8811 Tel. (+39) 02 66101029 (Centro Antiveleni Ospedale Niguarda Milano) |

2 – HAZARDS IDENTIFICATIONS

| |
|---|
| Classification: the product is not classified as hazardous according to 99/45/EC |
| Principal chemical and physical hazards: In normal conditions the product is not dangerous |
| Negative effects: <ul style="list-style-type: none">• On health: the product is not hazardous if handled correctly, although avoid eyes and skin contact and ingestion. At high powders concentration the product may cause nose and respiratory tract irritations. |
| Symptoms connected to improper use: N.D. |
| Other hazards: in case of fire decomposition fumes are highly noxious (NOx) |

3 – COMPOSITION/INFORMATION ON INGREDIENTS

| |
|--|
| General information on ingredients: formula based on Zinc , Manganese EDTA, boron and molybdenum salt |
|--|



Printed 18/05/10

Issued 31/01/2008

Revision 1 (18/05/2010)

4 – FIRST AID MEASURES**Symptoms and effects description**

- **Inhalation:** powder can irritate respiratory tract
- **Skin contact:** Rinse the contaminated part with water and soap. Wash clothes before reuse.
- **Eye contact:** Rinse with water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice.
- **Ingestion:** Rinse mouth, give water to drink. Seek medical advice

Special first aid equipment: not applicable**5 – FIRE-FIGHTING MEASURES****Suitable extinguishing media:** vaporized water, foam, carbon dioxide (CO₂).**Unsuitable extinguishing media:** none known**Special exposure hazards:** nitrous and sulphur fumes can be released**Special protective equipment for fire-fighters:** Use self-contained respiratory equipment and fireproof clothing**6 – ACCIDENTAL RELEASE MEASURE****Personal precautions (see section 8)**

Wear protective equipment before entering into dangerous area

Environmental precautions:

When possible store in a clean container ready to reuse

Methods for cleaning up:

Wash with plenty of water

Use of absorbing material: Absorb with inert material (vermiculite). According to the contamination level store in an authorized dump.



Printed 18/05/10

Issued

31/01/2008

Revision 1 (18/05/2010)

7 – HANDLING AND STORAGE

7.1 Handling

Safety precautions

- **Local and general ventilation:** Operate in well-ventilated areas far from incompatible and reactive substances
- **Environment protection:** Storage in limited areas with containing device
- **Specific requirement (recommended equipment and handling advice):** Always respect hygienic rules, do not drink neither eat. Avoid skin and eye contact. Avoid powders inhalation. Use self-protective equipment. Remove all contaminated clothing and wash them before reuse.

7.2 Storage

Safety conditions

- **Incompatible products:** watery solutions release hydrogen in contact with copper and aluminium.
- **Storage information:** Keep containers tightly closed in a well-ventilated place. Avoid powder making, the product may cause an air-powder explosive mix
- **Packing materials recommended:** Plastic packaging

7.3 Specific use: Not applicable

8 – PERSONAL PROTECTION/ EXPOSURE CONTROL

8.1 Exposure limits

Ensure general or local air exchange through aspirators where fumes can be released

ACGIH (2003): recommended limit – powder to be inhaled: TLV/TWA: 10 mg/m³

ACGIH (2003): recommended limit – breathable powder: TLV/TWA: 3 mg/m³

8.2 Exposure control

Ensure general or local air exchange through aspirators where fumes can be released

8.2.1 Professional exposure control

8.2.1.1 Respiratory protection: Use anti-powder mask with P2 filters

8.2.1.2 Hand protection: use long PVC gloves with cuffs

8.2.1.3 Eye protection: Protect eye/face, provide eye baths

8.2.1.4 Skin protection: Wear protective clothing

8.2.2 Environmental exposure control: Keep product concentration under the established exposure limits



Printed 18/05/10

Issued

31/01/2008

Revision 1 (18/05/2010)

9 – PHYSICAL AND CHEMICAL PROPERTIES**9.1 GENERAL INFORMATION****Appearance**

- **Physical state (25° C):** Solid
- **Colour:** white
- **Appearance:** Microgranules
- **Odour** Odourless

9.2 IMPORTANT INFORMATION ABOUT HEALTH, SAFETY AND ENVIRONMENT

| | | |
|--|----------------|-----------------------------------|
| pH water solution 1% | 4.3 | 25° C |
| Boiling point/range | Not applicable | °C at Pa (1mmHg = 133.32 Pa) |
| Flammability point/range (liquids) | Not applicable | °C open container |
| Flammability (solids) | Not available | °C closed container |
| Flammability (gases, gasiform liquids and solids) | Not available | Explosion limit inf. % vol. |
| | | Explosion limit sup. % vol. |
| Explosive properties | Not applicable | |
| Combustive properties | Not applicable | mm/s |
| Vapour pressure | Not applicable | kPa at 20° C (1 mmHg = 133.32 Pa) |
| Relative density | 0.96 | kg/dm ³ |
| Solubility | | |
| • Hydro-solubility | 200 | g/l at 25° C |
| Partition coefficient (n-octanol/water) Pow | Not available | Log Pow = at °C |
| Viscosity | Not applicable | Pa.s at °C |
| Vapour density (air = 1) | Not applicable | |
| Vaporization speed (depending upon...) | Not applicable | |
| 9.3 OTHER INFORMATION | | |
| Auto-ignition | Not available | °C |
| Melting point/range | Not applicable | °C |
| Decomposition temperature | Not available | °C |
| Apparent density | Not available | |
| Solubility in others solvents | Not available | |
| Conductivity | 0.467 | (1‰) mS/cm 18 °C |
| Explosion limit (LEL) | >40 | g/m ³ |

10 – STABILITY AND REACTIVITY

10.1 Conditions to avoid: reactions with strong oxidant. Heating at high temperature (250-300 °C) and humid and unventilated places

10.2 Materials to avoid: watery solutions release hydrogen in contact with copper and aluminium.

10.3 Hazardous decomposition products: in case of fire NO_x CO



Printed 18/05/10

Issued 31/01/2008

Revision 1 (18/05/2010)

11 – TOXICOLOGICAL INFORMATION

| |
|--|
| Hazardous effects on health caused by exposure (see sections 2 and 4) |
| Organs target |
| Symptoms |
| Information about different kind of exposure |
| <ul style="list-style-type: none"> Inhalation: Fumes can irritate respiratory tract. Nitrogen oxides which may be released over 150°C can cause a lungs oedema as well as respiratory tract infections Skin and eye contact: the prolonged skin contact may cause irritation and itches, direct eye contact may cause irritation |
| Immediate, delayed and chronic effects caused by short or long exposure |
| No relevant carcinogenic effects |

12 – ECOLOGICAL INFORMATION

Use according to good working rules, avoid to dispose of the product in the environment. The product nourishes unwanted algae.

| |
|--|
| 12.1 Ecotoxicity: |
| not available |
| 12.2 Mobility |
| not available |
| 12.3 Persistence and degradability |
| not available |
| 12.4 Potential of bioaccumulation |
| not available |
| 12.5 Other hazardous effects: Not available |

13 – DISPOSAL INFORMATION

| |
|--|
| Safety descriptions and measures upon disposal of surplus and residual: |
| Suitable disposal of the product |
| According to the contamination level and nature, store the residual product as fertilizer in farm or in an authorized dump |
| Suitable disposal of contaminated packaging: Packing can be disposed as plastic. |



Printed 18/05/10

Issued

31/01/2008

Revision 1 (18/05/2010)

14 – TRANSPORT INFORMATION

| |
|------------------------------|
| UN number: N.A. |
| Packing group: N.A. |
| Description of goods: N.A. |
| Transport class: N.A. |
| Particular precautions: N.A. |

15 – REGULATORY INFORMATION

| |
|--|
| Label information |
| Specific community dispositions upon man and environment protection |
| Exposure limits in working places ACGIH (2003): recommended limit – powder to be inhaled: TLV/TWA: 10 mg/m ³ ACGIH (2003): recommended limit – breathable powder: TLV/TWA: 3 mg/m ³ |

16 – OTHER INFORMATION

| |
|---|
| Relevant information about safety, health and environment |
| <ul style="list-style-type: none">Professional training information: The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility the correct use of this product, according to suitable measures of industrial hygieneInformation about handling and eventual restrictions: Do not use the product for different purpose. This may cause not estimated risksSources: 1 – Raw materials producers' data 2 – Limits and IBE about risks caused by chemical agents in working places (Federchimica Ed.2003) |

| |
|--|
| All the information in the safety data above is to our best present knowledge correct and complete. All safety measures are not provided on the safety sheet so other measures in particular conditions can not be requested. It remains the user responsibility to make sure that the information is appropriate and complete for product special use. |
|--|