

## 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 =



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## SAFETY DATA SHEET (2001/58/EC)

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

1.1 Identification of the substance	BREXIL COMBI
1.2 Intended use	Agriculture fertilizer
1.3 Identification of the company/undertaking	VALAGRO Spa Zona Industriale ATESSA (CHIETI) ITALY Tel. +39 872 8811 Fax +39 872 897416 Email : l.giannantonio@valagro.com
1.4 Emergency telephone	Tel. 0872 881366 Tel. 02 66101029 (Centro Antiveleeni Ospedale Niguarda Milano)

### 2 – HAZARDS IDENTIFICATIONS

<b>Classification:</b> the product is not classified as hazardous according to 99/45/EC
<b>Principal chemical and physical hazards:</b> the product does not present any risk in normal handling conditions
<b>Negative effects:</b> <ul style="list-style-type: none"><li>• <b>On health:</b> the product is not hazardous if correctly handled. Avoid eye and skin contact and ingestion. High powder concentrations may cause irritations to nose and to respiratory tract.</li><li>• <b>On environment:</b> the product is noxious to aquatic organisms</li></ul>
<b>Symptoms connected to improper use:</b> not available
<b>Other hazards:</b> in case of fire decomposition fumes may be highly toxic (CO, SO <sub>x</sub> )

### 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>General information on ingredients:</b> iron ligninsulphonate complex, zinc, copper, manganese, molybdenum and boron
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### 4 – FIRST AID MEASURES

#### *Symptoms and effects description*

- **Inhalation:** the powder may cause irritations to 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 if the irritation spreads.
- **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, CO<sub>2</sub>.

*Unsuitable extinguishing media:* not known

*Special exposure hazards caused by substance, combustible products or fumes:* sulphuric fumes may 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 pick up the product into a clean recipient either to reuse or dump.

#### *Methods for cleaning up:*

Wash the residual with plenty of water.

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

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## 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 eye and skin contact. Also avoid powders inhalation. Use self-protective equipment. Remove all contaminated clothing and wash them before reuse.

### 7.2 Storage

#### Safety conditions

- **Incompatible products:** not known
- **Storage information:** Keep containers tightly closed in a well-ventilated place.
- **Packing materials recommended:** Plastic packaging

7.3 **Specific use:** not applicable

## 8 – PERSONAL PROTECTION/ EXPOSURE CONTROL

### 8.1 Exposure limits

Copper (Cu) exposure limit TWA 1 mg/m<sup>3</sup> powder or fog  
Iron (Fe) exposure limit TWA 1 mg/m<sup>3</sup> soluble salts  
Molybdenum (Mo) exposure limit TWA 0.5 mg/m<sup>3</sup> soluble compounds  
Manganese (Mg) exposure limit TWA 0.2 mg/m<sup>3</sup> inorganic compounds

ACGIH (2003): recommended limit – powder to be inhaled: TLV/TWA: 10 mg/m<sup>3</sup>

ACGIH (2003): recommended limit – breathable powder: TLV/TWA: 3 mg/m<sup>3</sup>

### 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

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## 9 – PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 GENERAL INFORMATION

#### Appearance

- **Physical state (25° C):** solid
- **Colour:** Brown
- **Appearance:** Microgranules

**Odour** coffee

### 9.2 IMPORTANT INFORMATION ABOUT HEALTH, SAFETY AND ENVIRONMENT

<b>pH water solution 1%</b>	3.3	25° C
<b>Boiling point/range</b>	Not applicable	°C at Pa (1mmHg = 133.32 Pa)
<b>Flammability point/range (liquids)</b>	Not applicable	°C open container
<b>Flammability (solids)</b>	Not available	°C closed container
<b>Flammability (gases, gasiform liquids and solids)</b>	Not available	Explosion limit inf. % vol.
		Explosion limit sup. % vol.
<b>Explosive properties</b>	Not applicable	
<b>Combustive properties</b>	Not applicable	mm/s
<b>Vapour pressure</b>	Not applicable	kPa at 20° C (1 mmHg = 133.32 Pa)
<b>Relative density</b>	0.72	kg/dm <sup>3</sup>
<b>Solubility</b>		
• <b>Hydro-solubility</b>	350	g/l at 25° C
<b>Partition coefficient (n-octanol/water) Pow</b>	Not available	Log Pow = at °C
<b>Viscosity</b>	Not applicable	Pa.s at °C
<b>Vapour density (air = 1)</b>	Not applicable	
<b>Vaporization speed (depending upon...)</b>	Not applicable	

### 9.3 OTHER INFORMATION

<b>Auto-ignition</b>	Not available	°C
<b>Explosion limit (inf.) of powder in air</b>	Not available	g/m <sup>3</sup>
<b>Melting point/range</b>	Not available	°C
<b>Decomposition temperature</b>	Not available	°C
<b>Apparent density</b>	Not available	
<b>Solubility in others solvents</b>	Not available	
<b>Conductivity</b>	0.65	(1‰) mS/cm 18 °C
<b>Explosive level (LEL)</b>	>40	g/m <sup>3</sup>

## 10 – STABILITY AND REACTIVITY

**10.1 Conditions to avoid:** Heating at high temperature (250-300 °C) and humid and unventilated places

**10.2 Materials to avoid:** contact with alkalis substances such as lime may cause ammoniac fumes release

**10.3 Hazardous decomposition products:** in case of fire SO<sub>x</sub> CO

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## 11 – TOXICOLOGICAL INFORMATION

**Hazardous effects on health caused by exposure (see sections 2 and 4)**

**Organs target**

**Symptoms**

**Information about different kind of exposure**

- **Inhalation:** Fumes can irritate respiratory tract. Nitrogen oxides which may be released over 150° C can cause a lungs oedema as well as an increased sensibility to respiratory tract infections.
- **Skin and eye contact:** The prolonged skin contact may cause irritation and hitching, the 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.

**12.1 Ecotoxicity:**

- **Aquatic:**  
LC50 Daphnia Magna 48 H 18.37 mg/l (file Valagro)  
LC50 Zebra Fish 96 H >100 mg/l (file Valagro)  
EC50 algae 72 H 28.6 mg/l (file Valagro)

**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 must be disposed of as "packing that have carried hazardous products"

**Community disposition of waste:**

**National or regional dispositions:**

## 14 – TRANSPORT INFORMATION

**UN number:**

**Packing group:**

**Description of goods:**

**Transport class:**

**Particular precautions:**

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## 15 – REGULATORY INFORMATION

**Risks phrases (R):** R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Safety phrases (S):** S61 Avoid release to the environment. Refer to special instructions/Safety data sheet

**Specific community dispositions upon man and environment protection:**

### Professional exposure control

Copper (Cu) exposure limit TWA 1 mg/m<sup>3</sup> powder or fog

Iron (Fe) exposure limit TWA 1 mg/m<sup>3</sup> soluble salts

Molybdenum (Mo) exposure limit TWA 0.5 mg/m<sup>3</sup> soluble compounds

Manganese (Mg) exposure limit TWA 0.2 mg/m<sup>3</sup> inorganic compounds

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ACGIH (2003): recommended limit – breathable powder: TLV/TWA: 3 mg/m<sup>3</sup>

## 16 – OTHER INFORMATION

### Relevant information about safety, health and environment

- **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 hygiene
- **Information about handling and eventual restrictions:** Do not use the product for different purpose. This may cause not estimated risks
- **Other information:** Product registered at Archivio Preparati Pericolosi of Istituto Superiore di Sanità (ISS)
- **Sources:** 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.