

Valagro S.p.A.

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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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Revision 0

SAFETY DATA SHEET (2001/58/EC)

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

1.1 Identification of the substance

AXILO RMX

1.2 Intended use

Agriculture fertilizer

1.3 Identification of the company/undertaking

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Email : l.giannantonio@valagro.com

1.4 Emergency telephone

Tel. 0872 881366
Tel. 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:

- **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 (CO,NOx)

3 - COMPOSITION/INFORMATION ON INGREDIENTS

General information on ingredients: formula based on Copper , Zinc , , Manganese ,Iron, EDTA

Chemical Description	N° EINECS	%	CAS NUMBER	SYMBOL	R PHRASES (see section 16)
Ethyldiaminetetraacetic acid, copper disodic complex	237-864-5	17	014025-15-1	Xn	R22

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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.

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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 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

Copper (Cu) exposure limits TWA 1 mg/m³ powder or fog

Iron (Fe) exposure limit TWA 1 mg/m³ soluble salts

Manganese (Mg) exposure limit TWA 0.2 mg/m³ inorganic compounds

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

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9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 GENERAL INFORMATION

Appearance

- **Physical state (25° C):** Solid
- **Colour:** green
- **Appearance:** Microgranules

Odour Odourless

9.2 IMPORTANT INFORMATION ABOUT HEALTH, SAFETY AND ENVIRONMENT

pH water solution 1%	4.7	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	1.009	kg/dm ³
Solubility		
• Hydro-solubility	100	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	0.277	(1‰) mS/cm 18 °C
Explosion limit (LEL)	>40	g/m ³

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:

10.3 Hazardous decomposition products: in case of fire NOx 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 respiratory tract infections
- **Skin and eye contact:** the prolonged skin contact may cause irritation and itches, direct eye contact may cause irritation
- **Ingestion:** LD50 oral,rat, >1750 mg/Kg for copper EDTA

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:

Aquatic: (for Copper ETA)

Fish (96 hours LC50) >100 mg/l

Daphna magna (24 hours EC50) >500 mg/l

Algae, the use of EDTA invalidates tests conditions of algae growth inhibition

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.

Community disposition of waste:

National or regional dispositions:

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14 – TRANSPORT INFORMATION

UN number:

Packing group:

Description of goods:

Transport class:

Particular precautions: N.A.

15 – REGULATORY INFORMATION

Label information

Specific community dispositions upon man and environment protection

Exposure limits in working places

Copper (Cu) exposure limits TWA 1 mg/m³ powder or fog

Iron (Fe) exposure limit TWA 1 mg/m³ soluble salts

Manganese (Mg) exposure limit TWA 0.2 mg/m³ inorganic compounds

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

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

16 – OTHER INFORMATION

Relevant information about safety, health and environment

- **Integral text of pertinent phrases R: R22** – Harmful if swallowed
- **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
- **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.