

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 1.0 (06/12/2010)

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	KENDAL
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 Antiveneni Ospedale Niguarda Milano)

2 – HAZARDS IDENTIFICATIONS

Classification: the product is not classified as hazardous according to 99/45/EC
Principal chemical and physical hazards: the product does not present any risk in normal handling conditions
Negative effects:
Symptoms connected to improper use: not available
Other hazards:

3 – COMPOSITION/INFORMATION ON INGREDIENTS

General information on ingredients: solution based on Urea, Protein hydrolysate, potassium hydroxide

4 – FIRST AID MEASURES

Symptoms and effects description
<ul style="list-style-type: none">• Inhalation: unlikely possible• 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.• Ingestion: rinse mouth with water. A consistent ingestion may cause irritation.
Special first aid equipment: not applicable

5 – FIRE-FIGHTING MEASURES

The product is not flammable

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Suitable extinguishing media: water, foam, CO₂, sand.

Unsuitable extinguishing media: not available

Special exposure hazards caused by substance, combustible products or fumes: In case of fire noxious fumes (SO₂, NO_x, CO, CO₂) 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 (boots, gloves, glasses)

Environmental precautions:

Avoid the product dispersing with earth or non-flammable absorbent material. When possible pick up the product into a clean recipient either to reuse or dump.

Methods for cleaning up:

Any release should be immediately cleaned up and pumped into an inert labelled emergency container.

- **Use of absorbing material:** Absorb with inert material, earth or sand.

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. 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:

8 – PERSONAL PROTECTION/ EXPOSURE CONTROL

8.1 Exposure limits

not applicable

8.2 Exposure control

Ensure general air exchange

8.2.1 Professional exposure control

8.2.1.1 Respiratory protection: not required in normal work conditions

8.2.1.2 Hand protection: Use long PVC gloves with cuffs

8.2.1.3 Eye protection: Protect eye/face.

8.2.1.4 Skin protection: follow the usual precautions concerning chemical product handling (i.e. PVC overalls)

8.2.2 Environmental exposure control: not applicable

9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 GENERAL INFORMATION		
Appearance		
• Physical state (25° C):	Liquid	
• Colour:	brown	
• Odour	Characteristic	
9.2 IMPORTANT INFORMATION ABOUT HEALTH, SAFETY AND ENVIRONMENT		
pH	4.6	25°C
pH water solution 1%	4.7	25° C
Boiling point/range	>100	°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 available	kPa at 20° C (1 mmHg = 133.32 Pa)
Relative density	1.3	kg/dm ³
Solubility		
• Hydro-solubility	Complete	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
Explosion limit (inf.) of powder in air	Not available	g/m ³
Decomposition temperature	Not available	°C
Apparent density	Not available	
Solubility in others solvents	Not available	
Conductivity	0.32	(1‰) mS/cm 18 °C
Group of gases	Not applicable	

10 – STABILITY AND REACTIVITY

10.1 Conditions to avoid: stable in storage and handling recommended conditions

10.2 Materials to avoid: avoid contact with strong oxidants

10.3 Hazardous decomposition products: CO, CO₂, SO₂, NO_x fumes can be released in case of very hot temperature

11 – TOXICOLOGICAL INFORMATION

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Hazardous effects on health caused by exposure: not available

Organs target: not available

Symptoms: not available

Information about different kind of exposure

- **Ingestion:** it may cause gastrointestinal irritations or ulcerations
- **Skin and eye contact:** The product may irritate skin and eyes

Immediate, delayed and chronic effects caused by short or long exposure
Not applicable

12 – ECOLOGICAL INFORMATION

Use according to good working rules, avoid to dispose of the product in the environment.

12.1 Ecotoxicity: not available

12.2 Mobility:

- **Known or hypothetic distribution in environmental sectors:** soluble product which may release in environmental sectors: water, soil, sediment.

12.3 Persistence and degradability:

Biodegradable organic substance which may require a Oxygen Biochemical Question

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: Product surplus and residual must be handled according to precautions and eventual personal protections indicated in sections 7 and 8

Suitable disposal of the product

- **Incineration:** the incineration is possible in authorized stations
- **Dumping:** The product can be disposed of in an authorized dump. The authorization is required before disposing of the product in purification stations.

Suitable disposal of contaminated packaging: after cleaning up packing must be recycled as plastic

14 – TRANSPORT INFORMATION

UN number: not applicable

Packing group: not applicable

Description of goods: not applicable

Transport class: not applicable

Particular precautions: not applicable

15 – REGULATORY INFORMATION

Label information: not applicable

Specific community dispositions upon man and environment protection: not applicable

16 – OTHER INFORMATION

Modified paragraph: 1

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Relevant information about safety, health and environment

- **Integral text of pertinent phrases R:**
- **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.