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Issued 22/11/2010

Revision 1.0 (22/11/2010)

**SAFETY DATA SHEET**  
**(According to Regulation EC No 453/2010)****1 - IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING**

<b>1.1 Product identifier</b>	
Trade name:	DALT MIX 5
<b>1.2 Relevant identified uses of the mixture and uses advised against</b>	
Relevant identified uses of the mixture:	Fertilizer
<b>1.3 Details of the supplier of the safety data sheet:</b>	
	VALAGRO Spa Zona Industriale 66041 ATESSA (CHIETI) ITALY Tel. (+39) 0872 8811 Fax (+39) 0872 881382
Competent person responsible for the safety data sheet:	E-mail: regulatory@valagro.com
<b>1.4 Emergency telephone number:</b>	
	Tel. (+39) 02 66101029 (Centro Antiveneni Ospedale Niguarda Milano) Tel. (+39) 0872 8811 (Valagro Spa _ from Monday to Friday from 8.30 to 13:00 and from 14:00 to 17.30 h)

**2 - HAZARDS IDENTIFICATIONS**

<b>2.1 Classification of the mixture:</b>	
<b>Classification according to Directive 1999/45/EC:</b> the product is not classified as hazardous according to Directive 99/45/EC	
<b>Most important adverse physicochemical, human health and environmental effects:</b> see sections from 9 to 12.	
<b>2.2 Label Elements</b>	
Hazard pictograms :	none
Signal word:	none
Hazard statements:	none
Precautionary statements:	none
<b>2.3 Other hazards</b>	
None	

**3 - COMPOSITION/INFORMATION ON INGREDIENTS**



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Name	EINECS	CAS	Classification Directive 67/548/EEC	Classification Regulation (EC)1272/2008	Conc. (%)
Ethylendiaminete traacetic acid, copper disodic complex	237-864-5	014025-15- 1	Xn; R22	Warning, Acute Tox. 4, H302: Harmful if swallowed.	10

**4 – FIRST AID MEASURES****4.1 Description of first aid measures**

Routes of exposure:

- **Inhalation:** powder can irritate respiratory tract
- **Skin:** Rinse the contaminated part with water and soap. Wash clothes before reuse.
- **Eye:** 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

**Advice:**

None

**4.2 Most important symptoms and effects, both acute and delayed**

- **Inhalation:** N.A.
- **Skin:** N.A.
- **Eye:** N.A.
- **Ingestion:** N.A.

**4.3 Indication of any immediate medical attention and special treatment needed**

N.A.

**5 – FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media:** vaporized water, foam, carbon dioxide (CO<sub>2</sub>).**Information on the appropriate extinguishing media:** N.A.**Unsuitable extinguishing media:** N.A.**Indications if extinguishing media are inappropriate for a particular situation involving the substance or**

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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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**mixture:** N.A.

### 5.2 Special hazards arising from the substance:

nitrous and sulphur fumes can be released

### 5.3 Advice for firefighters:

Use self-contained respiratory equipment and fireproof clothing

## 6 - ACCIDENTAL RELEASE MEASURE

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel:** Keep away from the affected area people not involved in the emergency intervention. Alert the responsible of the internal emergency.

**For emergency responders:** Wear protective clothes giving a total skin protection, latex gloves and safety glasses. See also section 8

### 6.2 Environmental precautions:

If possible store into a clean container either to reuse or disposal. Avoid waterway and discharging contamination, competent authority must be informed in case of waterway accidental contamination

### 6.3 Methods and material for containment and cleaning up:

Wash with plenty of water. Absorb with inert material (vermiculite). According to the contamination level store in an authorized dump.

### 6.4 Reference to other sections:

referred to Sections 8 and 13

## 7 - HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Operate in well-ventilated areas far from incompatible and reactive substances

### 7.2 Conditions for safe storage, including any incompatibilities

Storage in limited areas with containing device

### 7.3 Specific end use(s):

N.A.

## 8 - EXPOSURE CONTROL/ PERSONAL PROTECTION

### 8.1 Control parameters

Occupational exposure limit values:



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<p>Copper (Cu) exposure limits TWA 1 mg/m<sup>3</sup> dust or mist</p> <p>Iron (Fe) exposure limit TWA 1 mg/m<sup>3</sup> soluble salts</p> <p>Manganese (Mn) exposure limit TWA 0.2 mg/m<sup>3</sup> inorganic compounds</p> <p>ACGIH (2003): recommended limit – powder to be inhaled: TLV/TWA: 10 mg/m<sup>3</sup></p> <p>ACGIH (2003): recommended limit – breathable powder: TLV/TWA: 3 mg/m<sup>3</sup></p> <p><b>biological limit values:</b> N.A. <b>DNEL:</b> N.A. <b>PNEC:</b> N.A. <b>Recommended monitoring procedures:</b> N.A.</p>
<p><b>8.2 Exposure control</b></p> <p>- Appropriate engineering controls: Ensure general or local air exchange through aspirators where fumes can be released</p> <p>- Individual protection measures, such as personal protective equipment:  <i><b>Eye / face protection:</b></i> Wear safety glasses according to the standard EN 166, don't use contact lenses.  <i><b>Skin protection:</b></i>                      -<i><b>Hand protection:</b></i> Wear latex gloves according to the standard EN 374.                      -<i><b>Other:</b></i> Wear total skin protection clothes  <i><b>Respiratory protection:</b></i> Use anti-powder mask with P2 filters</p> <p>- <b>Environmental exposure controls:</b> Keep product concentration under the established exposure limits</p>

**9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>9.1 Information on basic physical and chemical properties</b>		
<i>Appearance (25° C):</i>	Yellow green microgranules	
<i>Odour:</i>	odourless	
<i>Odour threshold:</i>	N.A.	
<i>pH:</i>	N.A.	at 25 °C
<i>Melting point/freezing point:</i>	N.A.	
<i>Initial boiling point and boiling range:</i>	N.A.	

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<b>Flash point:</b>	N.A.	
<b>Evaporation rate:</b>	N.A.	
<b>Flammability (solid, gas):</b>	N.A.	
<b>Upper/lower flammability or explosive limits:</b>	N.A.	
<b>Vapour pressure:</b>	N.A.	
<b>Vapour density:</b>	N.A.	
<b>Relative density:</b>	0,99	kg/dm <sup>3</sup>
<b>Solubility:</b> - <b>Solubility in water:</b> - <b>Lipid solubility:</b>	100	g/l at 25°C g/l at 25°C
<b>Partition coefficient: n-octanol/water</b>	N.A.	
<b>Auto-ignition temperature:</b>	N.A.	
<b>Decomposition temperature:</b>	N.A.	
<b>Viscosity:</b>	N.A.	
<b>Explosive properties:</b>	N.A.	
<b>Oxidising properties:</b>	N.A.	
<b>9.2 Other information</b>		
<b>pH water solution 1%</b>	4.5	at 25°C
<b>Conductivity</b>	0.55	(1‰) mS/cm 18 °C

## 10 - STABILITY AND REACTIVITY

<b>10.1 Reactivity:</b>
Heating at high temperature (250-300 °C) ; humid and unventilated places
<b>10.2 Chemical stability:</b>
N.A.
<b>10.3 Possibility of hazardous reactions:</b>
in case of fire NO <sub>x</sub> ; CO are released
<b>10.4 Conditions to avoid:</b>
N.A.
<b>10.5 Incompatible materials:</b>
N.A.
<b>10.6 Hazardous decomposition products:</b>
N.A.

## 11 - TOXICOLOGICAL INFORMATION



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Toxicological (health) effects caused by exposure to the mixture: see also sections 2 and 4.

### 11.1 Information on toxicological effects

- **acute toxicity:** LD50 oral, rat, >1750 mg/Kg for copper EDTA
- **irritation:** the prolonged skin contact may cause irritation and itches, direct eye contact may cause irritation
- **corrosivity:** N.A.
- **sensitisation:** N.A.
- **repeated dose toxicity:** N.A.
- **Carcinogenicity:** N.A.
- **mutagenicity:** N.A.
- **toxicity for reproduction:** N.A.

## 12 - ECOLOGICAL INFORMATION

Use according to good working rules, avoid to dispose of the product in the environment (see sections 6, 7, 13, 14 e 15).

### 12.1 Toxicity:

**Aquatic:** (for Copper EDTA)

*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 Persistence and degradability:

N.A.

### 12.3 Bioaccumulative potential:

N.A.

### 12.4 Mobility in soil:

N.A.

### 12.5 Results of PBT and vPvB assessment

N.A.

### 12.6 Other adverse effects

N.A.

## 13 - DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods



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Recover the product, if possible, or send to the incineration and disposal system.

Avoid waterway and discharging contamination.

Follow the local and national disposition in force

## 14 - TRANSPORT INFORMATION

Not dangerous product within the meaning of transport regulations

## 15 - REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance:

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments. Council Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparations) and subsequent amendments. Commission Directive 98/24/EC (Protection of the health and safety of workers from the risk related to chemical agent). Commission Directive 2000/39/EC (Occupational exposure limit values). Regulation (EC) No 1907/2006 (REACH). Regulation (EC) No 1272/2008 (CLP) (Annex VI). Regulation (EC) No 790/2009 (Annex IV, Annex V).

### 15.2. Chemical safety assessment:

## 16 - OTHER INFORMATION

This MSDS was revised to get it compliant to regulation 453/2010 and cancels and replaces any preceding release. 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.

### 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  
ACGIH - Threshold Limit Values - 2004 edition  
ESIS

**Xn:** harmful

**R22:** Harmful if swallowed

### Acronyms used in the safety data sheet:

**ADN:** Accord europeen relative au transport international des marchandises dangereuses par voies de navigation interieures (accordo europeo relativo al trasporto internazionale delle merci pericolose per vie navigabili interne)

**ADR:** Accord europeen relative au transport International des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)

**ACGIH:** American Conference of Governmental Industrial Hygienist



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**BOD5:** Biological Oxygen Demand (domanda biochimica di ossigeno)  
**COD:** Chemical Oxygen Demand (domanda chimica di ossigeno)  
**CL50:** Lethal concentration 50 (Concentrazione Letale per il 50% degli individui)  
**CLP:** Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)  
**CSR:** Rapporto sulla sicurezza chimica (Chemical Safety Report)  
**DL 50:** Lethal Dose 50 (Dose letale per il 50% degli individui)  
**DNEL :** Derived No effect level (livello derivato senza effetto)  
**IARC:** International Agency for Research on Cancer (Ente internazionale per la ricerca sul cancro)  
**IATA:** International air transport association (associazione internazionale del trasporto Aereo)  
**ICAO:** International Civil aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)  
**Codice IMDG:** International Maritime Dangerous Goods code (Codice sul regolamento del trasporto marittimo)  
**PBT:** Persistent, bioaccumulative and toxic (sostanze persistenti, bioaccumulabili e tossiche)  
**PNEC:** Predicted No Effect Concentration (concentrazione prevedibile priva di effetti)  
**RID:** Reglement concernant le transport International ferroviarie des marchandises dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose)  
**STEL:** short term exposure limit (limite di esposizione a breve termine)  
**TLV:** threshold limit value (soglia di valore limite)  
**TWA:** Time Weighted Average (media ponderata nel tempo)  
**UE:** European Union (Unione europea)  
**vPvB:** Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)  
N.A. : not available