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VALAGRO SDS according to Regulation (EU) N. 453/2010

Date: 07/02/2013 Rev. 3.0

Product: ACTIWIN 20-5-10

Code: 12008

Print Date: 8 February 2013

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## **SAFETY DATA SHEET**

### **Actiwin 20-5-10**

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#### **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

##### 1.1. Product identifier

Mixture identification:

Trade name: Actiwin 20-5-10

Trade code: 12008

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against:

Fertilizer

##### 1.3. Details of the supplier of the safety data sheet

Company:

VALAGRO Spa

Via Cagliari, 1 Zona Industriale

66041 Atessa (CH) ITALY

Tel. (+39) 08728811 Fax (+39) 0872881382

[www.valagro.com](http://www.valagro.com)

Competent person responsible for the safety data sheet:

[regulatory@valagro.com](mailto:regulatory@valagro.com)

##### 1.4. Emergency telephone number

VALAGRO SPA - Telephone (+39) 0872 8811; Telefax number. (+39) 0872 881382 (Monday to Friday from 8:30 to 13:00 and 14:00 to 17.30 (GMT +1))

- Tel. 011/6637637 (Azienda Ospedaliera "S.G.Battista"- Molinette - Torino)

- Tel. 02 66101029 (Centro Antiveleni Ospedale Niguarda Cà Granda - Milano)

- Tel. 0382/24444 (Gen.Naz.Inform.Tossic.Fond. S.Maugeri – Clinica del lavoro e della riabilitazione – Pavia)

- Tel. 049/8275078 (Serv. Antiv. - Gen.Iterdipartimentale di ricerca sulle intossicazioni acute Dip. di Farmac. "E.Meneghetti" Università degli studi di Padova)

- Tel 010/5636245 (Servizio antiveleni Serv. Pr. Socc., Accett. e Oss. - Istituto scientifico "G.Gaslini" - Genova)

- Tel. 055/4277238 (Centro antiveleni – U.O. Tossicologia Medica - Azienda Ospedaliera Careggi - Firenze)

- Tel 06/3054343 – (Centro antiveleni Policlinico A. Gemelli- Università Cattolica del Sacro Cuore - Roma)

- Tel. 06/49970698 (Centro Antiveleni - Istituto di Anestesiologia e rianimazione- Università degli Studi di Roma "La Sapienza")

- Tel. 081/7472870 (Centro Antiveleni Azienda Ospedaliera A. Cardarelli – Napoli)

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#### **SECTION 2: Hazards identification**

##### 2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

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**Properties / Symbols:**

This product is not a hazardous article and need not be labelled according to EC Directive 67/548, 99/45 as amended.

**EC regulation criteria 1272/2008 (CLP):**

The mixture is not classified as dangerous according to EC Regulation 1272/2008 (CLP).

**Adverse physicochemical, human health and environmental effects:**

No other hazards

**2.2. Label elements****Special Provisions:**

EUH210 — 'Safety data sheet available on request'.

**Symbols:**

None

**Hazard statements:**

None

**Precautionary statements:**

None

**Special Provisions:**

None

**2.3. Other hazards**

vPvB Substances: None - PBT Substances: None

**Other Hazards:**

No other hazards

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**SECTION 3: Composition/information on ingredients****3.1. Substances**

N.A.

**3.2. Mixtures**

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

15% - 20% Calcium sulfate; CAS :7778-18-9; EC: 231-900-3;

Substance with a Community workplace exposure limit

5% - 7% iron (II) sulfate

Index number: 026-003-00-7, CAS: 7720-78-7, EC: 231-753-5

Xn,Xi; R22-36/38

 3.3/2 Eye Irrit. 2 H319

 3.2/2 Skin Irrit. 2 H315

 3.1/4/Oral Acute Tox. 4 H302

For full text of H-statements and R-phrases: see SECTION 16

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**SECTION 4: First aid measures****4.1. Description of first aid measures**

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In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

No data available for the mixture

Symptoms related to iron sulphate:

Vomiting, diarrhea, mild lethargy, upper abdominal pain, pallor, and hyperglycemia with more severe clinical findings including cyanosis, stupor, acidosis, haematemesis, shock, and coma (Aisen, 1990).

Corrosion of the gastric mucosa occurs in humans following iron overdose (Hoppe *et al.*, 1955).

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No data available

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## **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces smoke containing carbon oxides, nitrogen oxides, sulfur oxides, phosphorus oxides

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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## **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training

- For non-emergency personnel:

Keep away from the affected area people not involved in the emergency intervention.

Ensure adequate ventilation

Alert the internal emergency team.

- For emergency responders:

Wear protective clothes giving a total skin protection, latex gloves and safety glasses.

See protective measures under point 7 and 8.

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Ensure adequate ventilation, move people in a safe place.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

Avoid raising dust

Wash with plenty of water and adsorb with organic material or sand collect the product absorbed for example using shovel and broom

6.4. Reference to other sections

See also section 8 and 13

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## SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep in the original package in a cool well-ventilated place, away from sources of heat

Keep away from food, drink and feed.

Incompatible materials:

Bases, oxidizing and reducing agents

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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## SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- Calcium Sulfate CAS :7778-18-9; EC: 231-900-3;

TLV TWA - 10 mg/m<sup>3</sup>

- iron (II) sulfate CAS: 7720-78-7, EC: 231-753-5

DNEL Exposure Limit Values

Consumer:

DNEL (oral) mg/Kg/day = 0.8 Assumes 24 h/d exposure

DNEL (dermal) mg/Kg/day = 0.8 Assumes 24 h/d exposure

DNEL (inhalation) mg/m<sup>3</sup> = 1.4 Assumes 24 h/d exposure

Worker:

DNEL (orale) mg/Kg/day = N.A. Assumes 8 h/d exposure

DNEL (pelle) mg/Kg/day = 1.6 Assumes 8 h/d exposure

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DNEL (inalazione)  $\text{mg}/\text{m}^3 = 5.5$  Assumes 8 h/d exposure

PNEC Exposure Limit Values:

PNECsediment (g Fe/kg dwt) = 49.5

PNEC soil (g/kg dwt) = 55

PNECstp (mg Fe/L) = 500

## 8.2. Exposure controls

Please observe the usual precautionary measures for handling of chemicals.

The personal protective equipment must be compliant to the regulation UNI –EN in force

### Eye protection:

Use close fitting safety goggles according to the standard EN 166, don't use eye lens

### Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton

### Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber according to EN 374

### Respiratory protection:

Use anti-powder mask with P2 (FFP2) filters according to the EN 143.

The powder exposition limit must be respected.

### Thermal Hazards:

None Known

### Environmental exposure controls:

None

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance and colour:	Microgranules grey
Odour:	N.A.
Odour threshold:	N.A.
pH 1%:	6.5
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Apparent density:	0.98(g/cm <sup>3</sup> at 20°C)
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

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9.2. Other information

Miscibility: N.A.  
Fat Solubility: N.A.  
Conductivity 1 % (mS/cm) 18°C: 0.38  
Substance Groups relevant properties N.A.

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**SECTION 10: Stability and reactivity**

10.1. Reactivity

Stable under normal conditions of storage and use

The product can release gaseous ammonia if in contact with alkaline substances such as lime

10.2. Chemical stability

Stable under normal conditions of storage and use

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

Stable under normal conditions.

Avoid high temperatures

10.5. Incompatible materials

Bases, oxidizing and reducing agents

10.6. Hazardous decomposition products

The product can release gaseous ammonia if in contact with alkaline substances such as lime

Burning produces smoke containing carbon oxides, nitrogen oxides, sulfur oxides, phosphorus oxides.

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**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

iron (II) sulfate, EC: 231-753-5

a) acute toxicity

oral LD50 (rat) >300-<2000 mg/kg bw (iron (II) sulfate)

dermal LD50 (rat) >2000 mg/kg bw (>881 mg Fe/kg) (Ferrous chloride)

Inhalation Rat 8h – no fatalities

b) skin corrosion/irritation:

Causes skin irritation.

c) serious eye damage/irritation:

Causes serious eye irritation.

d) respiratory or skin sensitisation:

N.A.

e) germ cell mutagenicity:

not classified as mutagen

f) carcinogenicity:

not classified as cancerogenic

g) reproductive toxicity:

no classification required

Ferrous sulfate NOAEL ≥ 1000 mg/Kg bw/day

h) STOT-single exposure:

N.A.

i) STOT-repeated exposure:

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- N.A.  
j) aspiration hazard.  
N.A.

Information on likely routes of exposure:

No toxicological information of the mixture.

Regarding the iron sulfate that is present in the mixture:

Inhalation: no data available

Skin/eye contact: Causes skin irritation; Causes serious eye irritation.

Ingestion: Acute symptoms are characterized by vomiting, diarrhea, mild lethargy, upper abdominal pain, pallor, and hyperglycemia with more severe clinical findings including cyanosis, stupor, acidosis, haematemesis, shock, and coma (Aisen, 1990).

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## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Based on available data, the product is non toxic for the environment

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

The product is soluble and mobile in both terrestrial and aquatic compartments

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

### 12.6. Other adverse effects

None

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

-Product: Recover if possible. Operate according to local and national.

Contact local authorities who will provide guidance regarding the disposal of special waste.

-Packaging: Dispose according to current regulations

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## SECTION 14: Transport information

### 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

### 14.2. UN proper shipping name

N.A.

### 14.3. Transport hazard class(es)

N.A.

### 14.4. Packing group

N.A.

### 14.5. Environmental hazards

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

### 14.6. Special precautions for user

N.A.

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14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
N.A.

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## **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)  
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Dir. 2006/8/EC  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP)  
Regulation (EU) n. 453/2010 (Annex I)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

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## **SECTION 16: Other information**

Text of phrases referred to under heading 3:

R22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H302 Harmful if swallowed.

This document was prepared by a competent person who has received appropriate training.

Paragraphs modified from the previous revision: all paragraphs

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

CCNL - Appendix 1

Insert further consulted bibliography

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.

This MSDS cancels and replaces any preceding release.



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ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.
N.A.:	No data available