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VALAGRO Safety Sheet  
Date: 07 September 2015 Rev. 2.0  
Product: Radifarm  
Code: 12392  
Print Date: 7 September 2015

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## **SAFETY SHEET**

### **Radifarm**

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

1.1. Product identifier

Mixture identification:

Trade name: Radifarm

Trade code: 12392

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

Recommended use:

Fertilizer

1.3. Details of the supplier of the safety data sheet

Produced and packed by:

VALAGRO Spa

Via Cagliari, 1 Zona Industriale

66041 Atessa (CH) ITALY

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

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

Distributed and guaranteed by:

Valagro USA Inc.

19500 Hwy 249, suite 245 - Houston TX 77070

Tel (281) 664 8700 - Fax (281) 664 8701

Competent person responsible for the safety data sheet:

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

1.4. Emergency telephone number

Valagro USA Inc

Tel (281) 664 8700 - Fax (281) 664 8701

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

2.1. Classification of the substance or mixture

Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200):

The product is not classified as dangerous

Classification according to Regulation (EC) No 1272/2008:

The product is not classified as dangerous

2.2. Label elements

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

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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 OSHA Hazard Communication Standard (29 CFR 1910.1200) and CLP regulation and related classification:

None

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### **SECTION 4: First aid measures**

4.1. Description of first aid measures

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

Inhalation:

The inhalation of the product is unlikely under normal working conditions;

Eyes and skin:

May cause irritation to skin and eyes according to the contact time with the product

Ingestion:

May cause irritation to the gastrointestinal tract

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

Treatment:

In case of incident seek medical advice showing the safety data sheet

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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.

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
- For non-emergency personnel:  
No action shall be taken involving any personal risk or without suitable training  
Wear protective clothes giving a total skin protection, gloves and safety glasses.  
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.  
Remove people to safety.
- 6.2. Environmental precautions  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it in landfill approved;  
If possible, collect in clean plastic containers labeled 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, soil, sand.
- 6.3. Methods and material for containment and cleaning up  
Wash with plenty of water, contain the spill with absorbent material  
Collect the product 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.  
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 original containers tightly closed in a well-ventilated place far from humidity and heat source  
Keep away from food, drink and feed.  
Incompatible materials:  
Aluminum.  
Instructions as regards storage premises:  
Adequately ventilated premises.
- 7.3. Specific end use(s)  
N.A.

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## **SECTION 8: Exposure controls/personal protection**

- 8.1. Control parameters  
No occupational exposure limit available  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.

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## 8.2. Exposure controls

## Eye protection:

Eye glasses with side protection.

## Protection for skin:

Chemical protection clothing.

## Protection for hands:

Gloves with long cuffs.

## Suitable material:

NR (natural rubber, natural latex).

PVC (polyvinyl chloride).

## Respiratory protection:

Not needed for normal use

## Thermal Hazards:

Thermal decomposition may produce carbon oxides (COx), nitrogen oxides (NOx).

## Environmental exposure controls:

Prevent the contamination of soil, surface water or groundwater.

**SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance and colour:	Brown Liquid
Odour:	N.A.
Odour threshold:	N.A.
pH:	6.0
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.
Density:	1,2 Kg/dm <sup>3</sup>
Solubility in water:	soluble
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.

## 9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

**SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Stable under normal conditions

## 10.2. Chemical stability

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Stable under normal conditions

Avoid heating at high temperatures

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Avoid high temperatures.

10.5. Incompatible materials

Aluminum.

10.6. Hazardous decomposition products

In case of fire and high temperatures can develop carbon oxides (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>)

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**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Inhalation:

The inhalation of the product is unlikely under normal working conditions;

Eyes and skin:

May cause irritation to skin and eyes according to the contact time with the product

Ingestion:

May cause irritation to the gastrointestinal tract

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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.

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

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. In so doing, comply with the local and national regulations currently in force. Contact local authorities who will provide guidance regarding the disposal of special waste.

Packaging: Dispose according to 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

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- N.A.
- 14.5. Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code  
N.A.

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### **SECTION 15: Regulatory information**

Hazard Communication Standard (HCS) Haz Com 2012  
OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009. Hazard Communication Standard  
United Nations Recommendations on the Transport of Dangerous Goods.  
OSHA Permissible Exposure Limit  
[29 CFR 1926.55 Appendix A](#)  
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV)  
National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL)  
Chemical Abstracts Service (CAS) Registry Number

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### **SECTION 16: Other information**

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

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.

- 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"

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	(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.