



ROOTS

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1- Product identifier:** ROOTS
- 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:**
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Calle Valentín Gardeta n°30, 3°A-21 - 22006 Huesca (Spain)
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- 1.4- Emergency telephone number:** +34 915 620 420

SECTION 2: HAZARDS IDENTIFICATION:

- 2.1- Classification of the substance or mixture:**
In compliance with EC regulation No. 1272/2008 and its amendments.
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present a health hazard excepting the limiting values for professional exposure (see point 3 and 8).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
- 2.2- Label elements:**
In compliance with EC regulation No. 1272/2008 and its amendments.
Precautionary statements - General:
P102 Keep out of reach of children.
Precautionary statements - Prevention:
P270 Do not eat, drink or smoke when using this product.
Precautionary statements - Disposal:
P264 Wash thoroughly after handling
- 2.3- Other hazards**
The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>.
The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annex XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS:

3.2- Mixture

Components:

This preparation does not contain substances hazardous to health and the environment in sufficient quantity to require reporting in this section.

SECTION 4: FIRST AID MEASURES:

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1- Description of first aid measures:

In the event of exposure by inhalation:

Remove the victim to fresh air. In case of respiratory problems, consult a doctor/medical service.

In the event of splashes or contact with eyes:

Flush immediately with plenty of water for 15 minutes keeping the eyelids open. If there is any pain, redness or visual impairment, consult an ophthalmologist.

If easy to do, remove contact lenses.

In the event of splashes or contact with skin:

Wash with plenty of water and soap. In case of redness or irritation, consult a doctor/medical service.

In the event of swallowing:

Seek medical attention immediately, showing the label.



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4.2- Most important symptoms and effects, both acute and delayed:

Symptoms/lesions after inhalation: cough, respiratory tract irritation.
Symptoms/lesions after skin contact: skin irritation, redness.
Symptoms/lesions after eye contact: corrosion, irritation of the eye tissues.
Symptoms/lesions after ingestion: abdominal pain, nausea.

4.3- Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES:

Non flammable

5.1- Extinguishing media:

In the event of a fire, use:

- Sprayed water or water mist
- Powder
- Carbon Dioxide (CO₂)

The choice of the method depends on the other products present.

Do not use a strong water jet, danger of spreading of the product.

5.2- Special hazards arising from the substance or mixture:

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

NA

5.3- Advice for fire-fighters:

Precautions against fire: like in case of all fires involving chemicals, wear appropriate protective equipment (chemical protective clothing, boots and gloves).

SECTION 6: ACCIDENTAL RELEASE MEASURES:

6.1- Personal precautions, protective equipment and emergency procedures:

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

If a large quantity has been split, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus (See section 8)

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2- Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

6.3- Methods and material for containment and cleaning up:

Clean preferably with a detergent, do not use solvents.

Accidental, ventilate the area and recovered by pumping the product for re-use (preferably) spill.

If the operation of pumping is not suitable, cover the product dry sand or vermiculite. Mix and make its removal by scanning. Transfer to a suitable container (dumpster) properly labeled and proceed to disposal by a company authorized to waste collection.

6.4- Reference to other sections:

See section 1 for information about emergency contact.

See section 13 for obtain additional information on waste treatment.

See section 8 for information on personal protection equipments.

SECTION 7: HANDLING AND STORAGE:

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1- Precautions for safe handling:

Always wash hands after handling.

Avoid inhalation of mist.

Fire prevention:

Prevent access by unauthorized personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.



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SECTION 7: HANDLING AND STORAGE:

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2- Conditions for safe storage, including any incompatibilities:

Storage

Keep out of reach of children.

Keep away from food, drink and animal feeding-stuffs.

Keep the product away from heat sources.

Storage temperature: 0-35°C

Store in a dry place.

Packaging

Always keep in packaging made of an identical material to the original.

Replace the label in case of split of packaging.

7.3- Specific end use(s):

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION:

8.1- Control parameters:

No data available.

8.2- Exposure Controls:

Appropriate engineering controls

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

A- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

B- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended:

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

C- Body protection

Suitable type of protective clothing:

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

D- Respiratory protection

If the setting of the product and its application (spray atomization) is generating aerosol or fine particles liquids, it is recommended to wear a respirator, properly fitted.

Exposure controls linked to environmental protection

If the setting oeuvre the product and its application (spray atomization) is generating aerosol or fine particles liquids, it is recommended to wear a respirator, properly fitted.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:

9.1- Information on basic physical and chemical properties:

General information:

Physical state:	Fluid liquid.
Color:	NA
Odor:	Characteristic
State:	Soluble concentrate (SL)

Important health, safety and environmental information

pH (aqueous solution):	NA
pH:	14,4,0 +/-0,6 Slightly basic.
Boiling point/boiling range:	Not relevant.
Flash point interval:	Not relevant.
Oxidizing properties:	Non comburant.
Vapor pressure (50°C):	Not relevant.
Density:	1,29
Water solubility:	Soluble.
Melting point/melting range:	Not relevant.
Self-ignition temperature:	Not relevant.
Decomposition point/decomposition range:	Not relevant.

9.2- Other Information:

No data available.

SECTION 10: STABILITY AND REACTIVITY:

10.1- Reactivity:

No data available.

10.2- Chemical Stability:

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3- Possibility of hazardous reactions:

No data available.

10.4- Conditions to avoid:

Avoid: Frost and exposure to light.

10.5- Incompatible materials:

Keep away from: Strong acids.

10.6- Hazardous decomposition products::

The thermal decomposition may release/form: Toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION:

11.1- Information on toxicological effects:

No data available.

11.1.1- Substances:

No toxicological data available for the substances.

11.1.2- Mixture:

Acute toxicity:

No data on the product itself is available. However according to the representative components, it is possible to provide: Oral LD50 (rat) > 2.000 mg/kg

Skin corrosion/skin irritation:

Slight erythema observed or no irritant effect.

Serious damage to eyes/eye irritation:

Little or non irritating to the ocular tissue.

Respiratory or skin sensitization:

No sensitizing effects known.

Germ cell mutagenicity:

No evidence of this effect was found.

Carcinogenicity:

No evidence of this effect was found.

Reproductive toxicant:

No evidence of this effect was found.



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SECTION 12: ECOLOGICAL INFORMATION:

The mineral elements (nutrients) contained in this product are essential for healthy plant growth, but may be harmful in large quantities to wildlife, aquatic organisms or sensitive plants. It is therefore necessary to minimize the amount of product released into the environment, except as part a rational fertilization program for the plants, preferably after a test for soil and/or plant issues.

12.1- Toxicity:

12.1.2.- Mixtures:

No aquatic toxicity data available for the mixture.

12.2- Persistence and degradability:

No data available.

12.3- Bio accumulative potential:

No data available.

12.4- Mobility in soil:

Not data available.

12.5- Results of PBT and vPvB assessment:

Not data available.

12.6- Other adverse effects:

Not data available.

SECTION 13: DISPOSAL CONSIDERATION:

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1- Waste treatments methods:

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Local arrangements:

Submit to an approved disposal.

SECTION 14: TRANSPORT INFORMATION:

Exempt from transport classification and labeling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

SECTION 15: REGULATORY INFORMATION:

15.1- Safety, health and environmental regulations/legislation specific for the substance or mixture:

- Classification and labeling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.

- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.

- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.

- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions:

No data available.

-Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol):

This product is not subject to any regulation concerning the nomenclature of classified installations (storage and use).

N/A

15.2- Chemical safety assessment:

No data available.



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SECTION 16: OTHER INFORMATION:

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

The information contained in this MSDS was obtained from sources which we believe are reliable and corresponds to the current state of our knowledge and experience of the product and is not exhaustive. This applies to product which conforms to the specifications, unless otherwise stated. In case of formulations or mixtures, make sure that no new dangers can not be produced.

The product should not be used for other purposes than those specified under section 1. Attention of users is drawn to the possible risks incurred when a product is used for purposes other than those for which it was designed, without the prior written handling instructions.

This complements the technical sheets but does not replace plug. Is not exempt under any circumstances, the product user to comply with all laws, regulations and procedures relating to the product, safety, hygiene and protection human health and the environment.

Monitoring of changes in the MSDS review in the light of Regulation CLP (CE) 1272/2008.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization

RID: Regulations concerning the International carriage of Dangerous goods by rail.

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

-- END OF SAFETY DATA SHEET--