

Issue date: 20/4/2018
2nd edition

SAFETY DATA SHEET

Material Safety Data Sheet

Safety Data Sheet according to regulation No 1907/2006/EU, as it has been adjusted and is currently in vigor.

1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: FREE-ROOT

Catalogue No.: PR.150

1.2 Relevant identified uses of the substance or mixture and non-indicated uses

Identified uses: Salinic soils adjuster

1.3 Details of the supplier of the safety data sheet

Company Identity: DEMIRTZOGLOU & ASSOCIATES SA

Address: 1 Ermou & Theotokopoulou str.,

ZIP. 144 52, Metamorphosis

Telephone: +30 210 284 5891

email : info@humofert.gr

1.4 Emergency call number:

Poison Center num: +30 210 7793777

2 – Hazards identification

2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 (CLP):

The product is not classified.

2.2 Labeling

According to Regulation (EC) No 1272/2008 (CLP):

The product does not need to be labelled.

2.3 Other hazards

According to Regulation (EC) No 1272/2008 (CLP):

Not known.

3 - Composition / Information on ingredients

3.1 Substance

Not applicable

3.2 Mixture

4 – First aid measures

4.1 First aids

Inhalation: Remove the victim to fresh air and let him rest in a position comfortable for breathing. If symptoms persist, seek medical advice.

Swallowing: Drink a lot of water. Do not induce vomiting. If symptoms persist, seek medical advice. Immediately call a POISON CENTER or doctor/physician.

Skin contact: Wash with soap and plenty of water. Remove immediately all contaminated clothing. Seek medical advice if necessary.

Eye contact: Rinse with water for about 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, seek medical advice.

4.2 Most significant symptoms and impacts, acute or subsequent

Symptoms: Not known.

4.3 Indication of any required immediate medical treatment and special cure

Treat symptomatically. No specific antidote is known.

5 – Fire fighting measures

5.1 Extinguishing means

Suitable extinguishing means: Water (spray), dry powder, foam

5.2 Special hazards arising from the substance or mixture

In case of fire harmful gases may be produced, such as nitric oxides.

5.3 Recommendations to the firemen

In case of fire put on a suitable fire-extinguishing-protective equipment a self-contained breathing apparatus.

Additional information: This product is not combustible. During fire extinction take into consideration the local circumstances and the surrounding environment. Contaminated fire-extinguishing water must be discarded according to the official regulations.

6 – Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: It is recommended to use protective gloves (protection according to EN374). Use work uniform. Avoid contact with eyes, skin and mouth.

6.2 Environmental Precautions

Restrain spreading of contaminated water/fire-extinction water. Do not allow it to enter the sewage system and contaminate superficial and underground waters.

6.3 Methods and materials for restriction and cleaning

Methods for cleaning up: In case of leakage absorb with a suitable, inactive absorbent material. Sweep. Transfer the waste in suitable (labeled) containers for obliteration. Clean well the whole area with plenty of water.

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6.4 Reference to other sections

More information in sections: 7 for handling, 8 for personal protection and 13 for disposal.

7 – Handling and Storage

7.1 Protections for safe handling

Recommendation for safe handling: Avoid contact with eyes and skin. Handle in accordance with good industrial hygiene and safety practice.

Recommendation for fire prevention and explosion protection: No special precautions are required for fire prevention.

7.2 Safe storage conditions, including possible non-compatibilities

Storage and packaging requirements: Store the product with its label on it, tightly closed. Store the product in a cool, dry and well-ventilated place. It must be stored separately from food. It is not a hazardous product if transferred according to the proper rules of transport.

Storage recommendation: the product should be stored separately from food.

Other clues: it is not a hazardous product if transferred according to the proper rules of transport.

8 – Exposure Control

8.1 Control parameters

Components with occupational exposure limit values

Not known occupational exposure limit values. The general limit value for dust should be obeyed.

8.2 Exposure controls

Individual protection measures:

Eyes/face protection: Use appropriate protective glasses (EN166)

Hands protection: It is recommended to use appropriate protective gloves when using the product (The selected protective gloves must satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 deriving from it).

Respiratory system protection: Be sure to work in a well ventilated area.

Personal hygiene measures: Avoid contact with eyes, skin and clothing. The use of self-contained work uniform is recommended. It is not allowed to drink or smoke or use smoke in the working area. Work clothes should be stored away from foods and drinks. Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: Prevent the material from entering the sewage system.

9 – Physical and chemical properties

9.1 Basic physical and chemical properties information

Form : Liquid

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Color :	Green
Odor :	Odorless
pH (25°C) :	2.9
Boiling point :	No information available
Melting point:	>>
Flammability temperature:	Not flammable
Flash point:	>>
Vaporization rate:	The product is not volatile
Flammability:	Not combustible
Lower explosion limit:	Not applicable
Upper explosion limit :	>>
Vapour pressure:	>>
Density (25°C):	1.02 g/ml
Solubility:	100% water soluble (25°C)
Oxidizing properties:	Not oxidizing
Viscosity :	No information available

9.2 Other information

10 – Stability and reactivity

Stable product under the recommended handling and storage conditions (section 7).

10.1 Reactivity

Stable product

10.2 Chemical Stability

Stable product under the recommended handling and storage conditions (section 7).

10.3 Hazardous reactions possibility

Not known.

10.4 Conditions to avoid

Not known.

10.5 Not compatible materials

Strong reducing agents, inflammable materials, metals, strong oxides, organic material.

10.6 Hazardous decomposition products

In case of fire hazardous nitrogen oxides may be formed.

11 – Toxicological information

11.1 Information about toxicological effects

The product has not been tested. The information arises from the hazardous properties of the individual ingredients, considering cut-off values, generic or specific concentration limits, applying cumulative methods and using multiplying factors when required.

Acute toxicity

Inhalation: There is no information about the product.

Swallowing: >>

Skin contact: >>

Eye contact: >>

Irritating Effect

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Inhalation: There is no information about the product.

Swallowing: >>

Skin contact: >>

Eye contact: >>

Chronic toxicity

Carcinogenicity: There is no information about the product.

Mutagenicity: >>

Teratogenic potential: >>

Effects on growth: >>

Effects on fertility: >>

Further information related to toxicity

Calcium chloride dihydrated

LD₅₀ (oral) rat: 3798 – 4179 mg/kg

LD₅₀ (oral) mouse: 1940 - 2045 mg/kg

LD₅₀ (oral) rabbit: 500 - 1000 mg/kg

LD₅₀ (skin) rabbit: >5000 mg/kg

Ethylenediaminetetraacetic acid, copper-disodium complex

LD₅₀ (oral) mouse: 890mg/kg

LC₅₀ (4h) (inhalation) mouse:> 5,32 mg/lt

Superflor 21% Boron Disodium Octaborate Tetrahydrate

LD₅₀ (oral) rat: > 3143.6 mg/kg

LD₅₀ (oral) mouse: 2877.2 mg/kg

LD₅₀ (skin) rabbit: >2000 mg/kg

LD₅₀ (skin) rat: >2000 mg/kg

LC₅₀ (5h) (inhalation) rat: >2.03 mg/l

NOAEL for carcinogenicity (oral) mouse: >201 mg B/kg/day

LOAEL for reproduction toxicity and fertility (oral) mouse: 17.5 mg/kg

12 – Ecological information

12.1 Toxicity

Evaluation of the toxicity in aquatic environments: It is very likely that the product does not demonstrate acute toxic effect on aquatic organisms. These declarations derive from the hazardous properties of the single ingredients, as well as from their concentrations in the mixture.

Toxicity on fish: The product has not been tested.

Toxicity on daphnias and other aquatic invertebrates: The product has not been tested.

Toxicity on aquatic plants: The product has not been tested.

Microorganisms/ Effects on activated silt: No hampering of the degrading ability of the activated silt is expected when the product enters biological purification premises at adequately low concentrations. The product has not been tested.

Long-term toxicity on fish: The product has not been tested.

Long-term toxicity on aquatic invertebrates: The product has not been tested.

Earth-toxicity estimation: The product has not been tested.

12.2 Persistence and degradability

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No information available.

It contains mineral ingredients which are not easily degradable.

12.3 Bioaccumulation potential

The product has not been tested. No bioaccumulation is expected in organisms.

12.4 Results of PBT and vPvB assessment

The product does not meet the criteria in order to be classified as PBTs (persistent, bioaccumulative and toxic) and vPvBs (very persistent and very bioaccumulative), since the single ingredients do not meet the criteria.

12.5 Other negative effects

The product does not contain substances which are referred in the regulation (EU) 1005/2009 as relevant to the substances which destroy the ozone layer.

13 – Information regarding disposal

13.1 Waste handling methods

Product: Chemical waste material must be disposed according to the directive 2008/98/EC about wastes as well as to the relative national regulations.

Packages with remaining product: Packages must be disposed according to the special regulations of each country or must be returned to packages recycling entity (P501).

14 – Transform information

	14.1. UN Number	14.2. Familiar expediti on name accordin g UN	14.3. Danger order/orders during transportatio n	14.4. Packaging group	14.5. Environmental hazards
Land transport ADR /RID	-	-	-	-	-
Sea transport ADN	-	-	-	-	-
Sea transport IMDG	-	-	-	-	-
Air transport IATA/ICAO	-	-	-	-	-

14.6 Special precautions for the user

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Not known.

14.7 Transportation of bulk material according to Appendix II of MARPOL contract 73/78 and of code IBC.

Not applicable.

15 – Regulatory information

This MSDS complies with the Regulation No 1907/2006/EU (REACH) & the Regulation (EU) No.1272/2008 [CLP].

15.1 Regulations/ legislation concerning safety, health and environment about the substance or the mixture

There is no information available.

15.2 Chemical safety evaluation

There has not been conducted a chemical safety evaluation by the supplier according to Regulation No 1907/2006/EU (REACH).

16 – Other information

The Safety data sheet should be used in combination with the technical documentation of the product. The Safety data sheet is prepared based on information collected up to the day that the Safety Data Sheet is written. It is a guide for the safe use, distribution, storage and transport of the product and it does not intend to provide any warning or detailed description. This information is relevant only for the product. If the product is combined with other material or in procedures other than the ones described this safety data sheet may not be applicable. The Safety data sheet meets the risk criteria of the Regulations of the Tested Products according to the directives of the European Union.