



# Material Safety Data Sheet

According to EC Regulation 1907/2006

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

MSDS Ref. No.: 2098.03.02  
Product name: Agroleaf® Power 11+5+19+2.5MgO+9CaO

### Use of the Substance/Preparation

Recommended use: Water soluble fertilizer

### Company/Undertaking Identification

• Everris International BV  
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Tel: ++31 (0) 45-5609100; Fax: ++31 (0) 45-5609190

Emergency telephone number: • +44 1235 239 670 (24h)

Email: INFO-MSDS@EVERRIS.com

## 2. HAZARDS IDENTIFICATION

### Classification

The product is classified and labelled in accordance with Directive 1999/45/EC  
O - Oxidizing

### Most important hazards

Contact with combustible material may cause fire.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature of the preparation

Components	CAS-No	Weight %	EC-No.	Classification
Boric acid, H3BO3	10043-35-3	< 1%	233-139-2	Repr.Cat.2;R60-61
Copper-EDTA	14025-15-1	< 1%	237-864-5	Xn;R22
Manganese-EDTA	15375-84-5	< 1%	239-407-5	NE
Sodium molybdate, Na2MoO4+2H2O	7631-95-0	< 1%	231-298-2	NE

Components	CAS-No	Weight %	EC-No.	Classification
Calcium nitrate, Ca(NO <sub>3</sub> ) <sub>2</sub>	13477-34-4	> 25%	233-332-1	O;R08 Xi;R36
Magnesium nitrate hexahydrate, Mg(NO <sub>3</sub> ) <sub>2</sub> +6H <sub>2</sub> O	13446-18-9	10 - 25%	233-826-7	O;R08
Potassium nitrate, KNO <sub>3</sub>	7757-79-1	> 25%	231-818-8	O;R08

NE = Non-Established

**For the full text of the R phrases mentioned in this Section, see Section 16**

#### 4. FIRST AID MEASURES

<b>General advice:</b>	Check the casualty's state of consciousness, breathing and pulse; put in emergency position or revive.
<b>Ingestion:</b>	Possible symptoms are nausea and/or vomiting. Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Do not induce vomiting without medical advice. Consult a physician if necessary.
<b>Inhalation:</b>	In the case of inhalation of aerosol/mist consult a physician if necessary. Possible symptoms are coughing and/or dyspnoea. If breathing is difficult, give oxygen. Move to fresh air.
<b>Skin contact:</b>	If skin irritation persists, call a physician.
<b>Eye contact:</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Protection of first-aiders:</b>	Avoid contact with eyes. Use personal protective equipment.

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Coordinate fire extinguishing measures to fire in surrounding area.
<b>Unsuitable extinguishing media:</b>	Not applicable
<b>Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:</b>	Danger of toxic gases in smoke in case of fire.
<b>Special protective equipment for firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific methods:</b>	Dike and collect water used to fight fire.

#### 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions:**

Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment. Wear personal protective equipment.

**Environmental precautions:**

Prevent product from entering drains. Do not contaminate surface water.

**Methods for cleaning up:**

Shovel or sweep up. Do not create a powder cloud by using a brush or compressed air.

## 7. HANDLING AND STORAGE

**Handling:****Technical measures/precautions:**

Provide appropriate exhaust ventilation at places where dust is formed.

**Safe handling advice:**

Avoid dust formation. Avoid contact with skin and eyes.

**Storage:****Technical measures/storage conditions:**

Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C .

**Incompatible products:**

Keep away from:

Flammable materials

Water soluble fertilizer.

**Specific use(s):****Packaging material:**

Plastic bags

**VCI (Germany)**

5.1B

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures to reduce exposure:**

Ensure adequate ventilation.

**Occupational exposure controls****Personal protective equipment****Respiratory protection:**

In case of insufficient ventilation wear suitable respiratory equipment.

**Hand protection:**

PVC or other plastic material gloves.

**Eye/face protection**

Tightly fitting safety goggles.

**Skin and body protection:**

Not applicable.

**Hygiene measures**

Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

**Exposure limit values****Environmental exposure controls**

Avoid dust formation.

**Boric acid, H3BO3**

Belgium - 8 Hr VLE	2 mg/m <sup>3</sup> TWA
Germany TRGS900:	0.5 mg/m <sup>3</sup> TWA
Portugal - TWAs	2 mg/m <sup>3</sup> TWA

**Copper-EDTA**

Finland - Occupational Exposure Limits - 8 hour	1 mg/m <sup>3</sup> TWA
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**Manganese-EDTA**

Belgium - 8 Hr VLE	0.2 mg/m <sup>3</sup> TWA
Czech Republic OEL	1 mg/m <sup>3</sup> TWA

**Sodium molybdate, Na2MoO4+2H2O**

Belgium - 8 Hr VLE	5 mg/m <sup>3</sup> TWA
Czech Republic OEL	5 mg/m <sup>3</sup> TWA
Finland - Occupational Exposure Limits - 8 hour	6 mg/m <sup>3</sup>
France - Valeurs Limites d'exposition (VLE)	5 mg/m <sup>3</sup>
France INRS (VME)	5 mg/m <sup>3</sup> VME
Norway - 8 h:	5 mg/m <sup>3</sup> TWA
Portugal - TWAs	0.5 mg/m <sup>3</sup> TWA
Spain - Valores Limite Ambientales - VLE	5 mg/m <sup>3</sup> VLA-ED
Sweden - OEL - 8 Hour	10 mg/m <sup>3</sup> LLV
	5 mg/m <sup>3</sup> LLV

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**General Information**

<b>Physical State:</b>	Solid
<b>Appearance:</b>	Powder
<b>Color:</b>	Off-white
<b>Odor:</b>	No information available

**Important Health Safety and Environmental Information**

<b>Solubility:</b>	Completely soluble
<b>Water solubility:</b>	+/- 30 - 45 kg/100L

**Other information**

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	Keep away from open flames, hot surfaces and sources of ignition. Burning produces obnoxious and toxic fumes.
<b>Materials to avoid:</b>	Combustible material.
<b>Hazardous decomposition products:</b>	No decomposition if stored normally. Thermal decomposition can lead to release of irritating gases and vapours.

## 11. TOXICOLOGICAL INFORMATION

### Component information

*Boric acid, H3BO3*  
LD50/oral/rat = > 3500 mg/kg

*Copper-EDTA*  
LD50/oral/rat = > 1000 mg/kg

*Sodium molybdate, Na2MoO4+2H2O*  
LD50/oral/rat = 4000 mg/kg

*Potassium nitrate, KNO3*  
LD50/oral/rat = 3750mg/kg

### Product information

#### Local effects

**Skin effects:** May cause skin irritation in susceptible persons

**Eye effects:** May cause eye irritation with susceptible persons

**Inhalation:** May cause sensitization by inhalation

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

## 12. ECOLOGICAL INFORMATION

### Product information

**Water Endangering Class (WGK):** 1 (Scotts classification )

### Component information

*Sodium molybdate, Na2MoO4+2H2O*  
**Ecotoxicity effects** LC50/96h/rainbow trout => 2800 mg/l

*Calcium nitrate, Ca(NO3)2*  
**Ecotoxicity effects** LC50/96h/rainbow trout =2400 mg/l

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Use up product completely. Packaging material is industrial waste

**Contaminated packaging:** Empty containers can be landfilled, when in compliance with the local regulations

**14. TRANSPORT INFORMATION****Product information****Physical State:** Solid**ADR/RID****UN-No:** 1479  
**Proper shipping name:** Oxidizing solid, N.O.S.  
**Hazard Class:** 5.1  
**Packing group:** PG III  
**Description:** Potassiumnitrate**IATA****UN-No:** 1479  
**Proper shipping name:** Oxidizing solid, N.O.S.  
**Hazard Class:** 5.1  
**Packing group:** PG III  
**Description:** Potassiumnitrate**IMO / IMDG****UN-No:** 1479  
**Proper shipping name:** Oxidizing solid, N.O.S.  
**Hazard Class:** 5.1  
**Packing group:** PG III  
**Description:** Potassiumnitrate  
**EmS:** F-A / S-Q**15. REGULATORY INFORMATION****Indication of danger:**

O - Oxidizing.

**R -phrase(s)**

R 8 - Contact with combustible material may cause fire.

## 15. REGULATORY INFORMATION

## 16. OTHER INFORMATION

### Text of R Phrases mentioned in Section 3

R 8 - Contact with combustible material may cause fire.

R22 - Harmful if swallowed.

R36 - Irritating to eyes.

**Reason for revision:** \*\*\* Indicates changes since the last revision. This version replaces all previous versions

**Prepared by:** Regulatory Affairs Department.

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**End of Safety Data Sheet**