## **Safety Data Sheet**

Issue Date: 30-Dec-2013 Revision Date: 23-May-2017 Version: 1

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name: Agroleaf Power 11-5-19+9CaO+2.5MgO+TE

Product Code 20980315GC

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

**Recommended Use:** Fertilizer. Restricted to professional users.

Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

**Everris International BV** 

Nijverheidsweg 1-5; 6422 PD Heerlen (NL); Tel: +31 (0) 45-5609100; Fax: +31 (0) 45-5609190

For further information, please contact

INFO-MSDS@EVERRIS.COM

1.4. Emergency telephone number

IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24h)

## **Section 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Eye Irritation	Category 1 - (H318)
Oxidizing solids	Category 3 - (H272)

#### 2.2. Label elements



#### Signal Word:

Danger

#### **Hazard Statements:**

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H272 - May intensify fire; oxidizer

Contains Nitric acid ammonium calcium salt

#### **Precautionary Statements:**

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P221 - Take any precaution to avoid mixing with combustibles

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## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Chemical Name	EC-No.	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Nitric acid ammonium calcium salt	239-289-5	15245-12-2	25 - 40%	Eye Dam. 1 (H318) Acute Tox. 4 (H302)	01-2119493947-16
Magnesium nitrate hexahydrate; Mg(NO <sub>3</sub> ) <sub>2</sub> +6H <sub>2</sub> O	233-826-7	13446-18-9	10 - 25%	Eye Irrit. 2 (H319)	01-2119491164-38
Iron-DTPA; Fe-DTPA	235-627-0	12389-75-2	1 - 5%	Not classified	01-2119980786-18
Manganese-EDTA, Mn-EDTA	239-407-5	15375-84-5	1 - 5%	Not classified	01-2119493600-40
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	233-139-2	10043-35-3	0.1 - 1%	Repr. 1B (H360FD)	01-2119486683-25
Sodium molybdate; Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	231-551-7	7631-95-0	< 0.1%	Not classified	01-2119489495-21
Copper-EDTA; Cu-EDTA	237-864-5	14025-15-1	< 0.1%	Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119963944-23

Full text of H- and EUH-phrases: see section 16

## **Section 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

**General Advice:** First aid measures should be executed by trained personnel only.

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.

**Skin Contact:** If skin irritation persists, call a physician.

Eye Contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

**Ingestion:** Possible symptoms are nausea and/or vommiting. 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. Call a physician or Poison Control Centre immediately.

**Protection of First-Aiders:** Avoid contact with eyes. Use personal protective equipment.

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

Symptoms: None under normal processing

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

Notes to Physician: None under normal processing.

## **Section 5: FIRE FIGHTING MEASURES**

5.1. Extinguishing media

Suitable extinguishing media:

Coordinate fire extinguishing measures to fire in surrounding area. Flooding quantities of water.

#### Unsuitable extinguishing media:

High volume water jet.

#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors. The product itself does not burn. May intensify fire; oxidizer.

#### 5.3. Advice for firefighters

Coordinate fire extinguishing measures to fire in surrounding area.

## Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions:**

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

#### For Emergency Responders:

Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

#### **Methods for Containment:**

Prevent further leakage or spillage if safe to do so.

#### **Methods for Cleanup:**

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

#### 6.4. Reference to other sections

§ 8, 12, 13.

## Section 7: HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. When using, do not eat, drink or smoke.

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#### 7.2. Conditions for safe storage, including any incompatibilities

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. 5.1B

Packaging Materials:

Store in original container.

## 7.3. Specific end use(s)

Specific use(s)

LGK (Germany)

Fertilizer; Read and follow label instructions; www.everris.com

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Iron-DTPA; Fe-DTPA		
Denmark	TWA: 1 mg/m <sup>3</sup>	
Finland	TWA: 1 mg/m <sup>3</sup>	
Portugal	TWA: 1 mg/m <sup>3</sup>	
Spain OEL - Time Weighted Average (TWA):	TWA: 1 mg/m <sup>3</sup>	
Switzerland	TWA: 1 mg/m <sup>3</sup>	
Manganese-EDTA, Mn-EDTA		

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Czech Republic OEL	1 mg/m³ TWA
Ireland	TWA: 0.2 mg/m <sup>3</sup>
	STEL: 0.6 mg/m <sup>3</sup>
Boric Acid; H3BO3	
Australia TWA	12 mg/m <sup>3</sup>
Belgium - 8 Hr TWA	2 mg/m³ TWA borate
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA (as B, listed under Boron and its inorganic compounds)
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Portugal	STEL: 6 mg/m <sup>3</sup>
	TWA: 2 mg/m <sup>3</sup>
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m <sup>3</sup>
	TWA: 2 mg/m <sup>3</sup>
Switzerland	STEL: 10 mg/m <sup>3</sup>
	TWA: 10 mg/m <sup>3</sup>
Sodium molybdate; Na2MoO4+2H2O	
Austria	STEL 10 mg/m <sup>3</sup>
	TWA: 5 mg/m <sup>3</sup>
Czech Republic OEL	5 mg/m³ TWA
Denmark	TWA: 5 mg/m <sup>3</sup>
Finland	TWA: 0.5 mg/m <sup>3</sup>
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m <sup>3</sup>
	STEL: 10 mg/m <sup>3</sup>
Ireland	TWA: 10 mg/m³ TWA: 0.5 mg/m³
	STEL: 30 mg/m³ STEL: 1.5 mg/m³
Norway	TWA: 5 mg/m <sup>3</sup>
Poland	STEL: 5 mg/m³
Poland	STEL: 10 mg/m³ TWA: 4 mg/m³
Portugal	TWA: 0.5 mg/m <sup>3</sup>
Spain OEL - Time Weighted Average (TWA):	TWA: 0.5 mg/m <sup>3</sup>
Switzerland	TWA: 5 mg/m³
UK oes/mel:	TWA: 5 mg/m³
Copper-EDTA; Cu-EDTA	TWA. 3 HIg/H
Austria	STEL 0.4 mg/m <sup>3</sup>
indott id	TWA: 0.1 mg/m <sup>3</sup>
Australia TWA	N.A.
Finland	TWA: 1 mg/m <sup>3</sup>
	1

#### Derived No Effect Level (DNEL).

## Predicted No Effect Concentration (PNEC).

#### 8.2. Exposure controls

Personal protective equipment

Eye/Face Protection: Tightly fitting safety goggles Not required

**Hand protection:** Nitrile rubber (0.26 mm). Break through time. > 8 h.

Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment

Skin and Body Protection: Wear normal, light working clothing

Hygiene Measures: Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away

from food, drink and animal feeding stuffs.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State:SolidAppearance:CrystalsColor:light green.Odor:Not significantBulk density:800 - 1200 kg/m³pH:4.5 (@ 200 g/l)Melting Point/Freezing Point:no data available

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**Boiling Point/Range:** Solid, Not Applicable Flash Point: Solid, Not Applicable **Evaporation Rate:** Solid, Not Applicable Flammability (solid, gas): Non-flammable **Vapor Pressure:** Solid, Not Applicable Solid, Not Applicable Vapor Density: no data available **Specific Gravity:** Water Solubility: no data available Solubility(ies) no data available **Partition Coefficient:** Solid, Not Applicable Not Applicable **Autoignition Temperature: Decomposition Temperature:** no data available

Explosive Properties: Doesn't present explosion hazard. Based on data of ingredients.

Oxidizing Properties: May intensify fire; oxidizer.

#### 9.2. Other information

Not applicable

## **Section 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

Not reactive.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### 10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition Burning produces obnoxious and toxic fumes

### 10.5. Incompatible materials

Keep away from catalysts like derivates of hexavalent chromium and metal halides Keep away from flammable products (fuels) like charcoal, wood, flour, soot etc

#### 10.6. Hazardous decomposition products

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

#### Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Product Information

**Inhalation** Inhalation of dust in high concentration may cause irritation of respiratory system.

**Eye contact** May cause slight irritation.

**Skin Contact** May cause irritation.

**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts.

**Information on Toxicological Effects:** 

Symptoms: No information available

**Acute Toxicity** 

The following values are calculated based on chapter 3.1 of the GHS document:

**ATEmix (oral):** 1,450.00 mg/kg

**Unknown Acute Toxicity:** 34% of the mixture consists of ingredient(s) of unknown toxicity.

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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nitric acid ammonium calcium	= 2000 mg/kg (Rat)		
salt			
Magnesium nitrate hexahydrate;	= 5440 mg/kg (Rat)		
Mg(NO <sub>3</sub> ) <sub>2</sub> +6H <sub>2</sub> O			
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h
Sodium molybdate;	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m³ (Rat) 4 h
Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O			-

## Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

No additional information available

Serious eye damage/eye irritation Classification based on individual ingredients of the mixture.

**Respiratory or skin sensitization** Classification based on individual ingredients of the mixture.

Germ Cell Mutagenicity Classification based on individual ingredients of the mixture.

**Carcinogenicity** Classification based on individual ingredients of the mixture.

**Reproductive Toxicity**Classification based on individual ingredients of the mixture.

**STOT - Single Exposure** Classification based on individual ingredients of the mixture.

**STOT - Repeated Exposure** Classification based on individual ingredients of the mixture.

Aspiration Hazard Classification based on individual ingredients of the mixture.

## **Section 12: ECOLOGICAL INFORMATION**

12.1. Toxicity

**Ecotoxicity effects:** Do not allow product to enter the environment uncontrolled.

**Unknown Aquatic Toxicity:** 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Nitric acid ammonium calcium salt	-	447: 48 h Carassius auratus mg/L LC50	-	-
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	-	1020: 72 h Carassius auratus mg/L LC50 flow-through	-	115 - 153: 48 h Daphnia magna mg/L EC50

#### 12.2. Persistence and degradability

Persistence and Degradability: No information available.

#### 12.3. Bioaccumulative potential

**Bioaccumulation:** No information available.

Chemical Name	LOGPOW
Nitric acid ammonium calcium salt	0
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	-0.757

#### 12.4. Mobility in soil

Mobility in soil No information available.

## 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment**No information available.

12.6. Other adverse effects

No information available. Mobility:

## **Section 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

**Disposal of Wastes:** Disposal should be in accordance with applicable regional,

national and local laws and regulations.

Do not re-use empty containers. Dispose of as unused product. **Contaminated Packaging:** Other Information:

Use up product completely. Packaging material is industrial

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## **Section 14: TRANSPORT INFORMATION**

IMO / IMDG

14.1 UN-No: 1479

14.2

Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)

14.3

Hazard Class: 5.1

14.4

Packing group: PG III

14.5

**Marine Pollutant:** Not regulated

14.6

EmS: F-A / S-Q **Special Provisions** 223, 274, 900

14.7

Transport in bulk according to Annex II of MARPOL 73/78 Not regulated

and the IBC Code

ADR/RID

14.1 1479 UN-No:

14.2

Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)

14.3

Hazard Class: 5.1

14.4

Packing group: PG III

14.5

**Environmental Hazard** Not regulated

14.6

**Special Provisions** 274 **Tunnel restriction code** Е

IATA

<u>14.1</u> UN-No:

14.2

Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)

14.3

**Hazard Class:** 5.1

14.4

Packing group: PG III

14.5

**Environmental Hazard** Not regulated

14.6

#### **Special Provisions**

А3

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## **Section 15: REGULATORY INFORMATION**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Belgium

Denmark

No data available Danish Sikkerhedsgruppe

**France** 

**ICPE** Classified installation: article 4706

Germany

LGK (Germany) 5.1B

Water Endangering Class (WGK): 1 (Everris classification)

Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

Component	German WGK Section
Manganese-EDTA, Mn-EDTA	class 2
15375-84-5 ( 1 - 5% )	
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	class 1
10043-35-3 ( 0.1 - 1% )	
Sodium molybdate; Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	class 1
7631-95-0 ( < 0.1% )	
Copper-EDTA; Cu-EDTA	class 2
14025-15-1 ( < 0.1% )	

## **European Union**

#### REACH:

<u>· · · · · · · · · · · · · · · · · · · </u>		
Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	Use restricted. See item 30.	
10043-35-3 ( 0.1 - 1% )		

#### 15.2 Chemical safety assessment

Substance(s) usage is covered according to Reach regulation 1907/2006

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

## **Section 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

H360FD - May damage fertility. May damage the unborn child H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H318 - Causes serious eye damage

Key or legend to abbreviations and acronyms used in the safety data sheet

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No Effect Concentration

DNEL: Derived No-Effect Level

Reach: Registration, Evaluation, authorization of Chemicals CLP: EU-GHS; Classification, Labelling and Packaging

OEL: Occupational Exposure Limit TWA: Time Weighted Average ATE: Acute Toxicity Estimate

EUH phrase: CLP (EU) specific hazard statement

LD50: Lethal dose, 50%.

LC50: Lethal concentration, 50%.

SVHC: Substance of very high concern.

Classification procedure: - Calculation method

- Expert judgment and weight of evidence determination

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Key literature references and sources for data

According to EC Regulation 1907/2006 (Reach), Regulation EU

No. 2015/830

Regulation (EC) No 1272/2008

Prepared by: Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM)

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**Reason for revision:**\*\*\* Indicates changes since the last revision. This version

replaces all previous versions

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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