## **Safety Data Sheet**

Issue Date: 09-Mar-2015 Revision Date: 11-Jul-2016 Version: 1

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

1.1. Product identifier

Product Code 21500215AU

Product Name: Peters Excel CalMag Finisher

Proper shipping name: Potassium nitrate Mixture

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

Recommended Use: Fertilizer

Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

Manufacture

Everris Australia Pty Ltd, 211/33 Lexington Drive, Bella Vista, NSW 2153, Australia. Tel: +61(2) 8801 3300

For further information, please contact

INFO-MSDS@EVERRIS.COM

1.4. Emergency telephone number

Australia: (02) 8014 4558 New Zealand: (09) 9929 1483

## **Section 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral- Category 5 (H303)	Category 4 - (H302)
Skin Corrosion or Irritation	Category 2 - (H315)
Serious Eye Damage or Eye Irritation	Category 2 - (H319)
Oxidizing solids	Category 3 - (H272)

#### 2.2. Label elements

**Product Identifier:** 



## Signal Word:

Warning

#### **Hazard Statements:**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H272 - May intensify fire; oxidizer

Contains Ureaphosphate, Magnesium nitrate hexahydrate;

Mg(NO<sub>3</sub>)<sub>2</sub>+6H<sub>2</sub>O, Nitric acid ammonium calcium salt

## Precautionary Statements - EU (§28, 1272/2008)

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

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P221 - Take any precaution to avoid mixing with combustibles

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Ingredients	EC-No.	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Potassium Nitrate; KNO₃	231-818-8	7757-79-1	30 - 60%	Ox. Sol. 3 (H272)	01-2119488224-35
Nitric acid ammonium calcium salt	239-289-5	15245-12-2	10 - 30%	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 - 30%	Eye Irrit. 2 (H319)	01-2119491164-38
Ureaphosphate	225-464-3	4861-19-2	10 - 30%	Skin Corr. 1B (H314)	01-2119489460-34
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
Copper-EDTA; Cu-EDTA	237-864-5	14025-15-1	0.1 - 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.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a

physician.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes.

**Eye Contact:** Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if

present, after the first 5 minutes, then continue rinsing. If eye irritation persists, consult a

specialist.

**Ingestion:** Call a physician or Poison Control Centre immediately.

**Protection of First-Aiders:** Low hazard for usual industrial or commercial handling.

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.

#### Hazchem code:

1Z

## **Section 6: ACCIDENTAL RELEASE MEASURES**

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

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Evacuate personnel to

safe areas.

For Emergency Responders: Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

Do not allow product to enter the environment uncontrolled.

## 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: Take up mechanically and collect in suitable container for disposal. If material is

uncontaminated, collect and reuse as recommended for product.

#### 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 container tightly closed in a dry and well-ventilated place.

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well.

LGK (Germany) 5.1B

Packaging Materials: Bags or Bulk.

#### 7.3. Specific end use(s)

Specific use(s) Fertilizer; Read and follow label instructions; www.everris.com

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parameters

Potassium Nitrate; KNO3			
Australia TWA	> 10 mg/m <sup>3</sup>		
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA		
Latvia - Occupational Exposure Limits - TWAs	5 mg/m³ TWA		
Boric Acid; H₃BO₃			
Australia TWA	12 mg/m³		
Belgium - 8 Hr TWA	2 mg/m <sup>3</sup> TWA borate		
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA (as B, listed under Boron and its inorganic compounds)		
German mak	TWA: 10 mg/m <sup>3</sup>		
	Ceiling / Peak: 10 mg/m <sup>3</sup>		

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	TWA: 0.5 mg/m <sup>3</sup>
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>
Copper-EDTA; Cu-EDTA	
Austria	STEL 4 mg/m <sup>3</sup>
	STEL 0.4 mg/m <sup>3</sup>
	TWA: 1 mg/m <sup>3</sup>
	TWA: 0.1 mg/m <sup>3</sup>
Australia TWA	N.A.
Finland	TWA: 1 mg/m <sup>3</sup>

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

No data available

#### Predicted No Effect Concentration (PNEC)

No data available.

8.2. Exposure controls

Engineering Measures to Reduce Ensure ac

Ensure adequate ventilation, especially in confined areas.

Exposure:

Personal protective equipment

Eye/Face Protection: Not required Wear face-shield and protective suit for abnormal processing problems.

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: Lightweight protective clothing

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

from food, drink and animal feeding stuffs.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

Physical State: Solid

Appearance: Prills, flakes and powder

Color: Off-white.
Odor: Not significant
Bulk density: +/- 1.13 kg/dm3
pH: no data available
Melting Point/Freezing Point: no data available

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

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

## 9.2. Other information

Not applicable

## Section 10: STABILITY AND REACTIVITY

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## 10.1. Reactivity

Not reactive.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

#### **Hazardous Decomposition Products:**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### **Possibility of Hazardous Reactions:**

None under normal processing.

#### 10.4. Conditions to avoid

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well.

#### 10.5. Incompatible materials

## 10.6. Hazardous decomposition products

None under normal processing.

## Section 11: TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

Acute Toxicity
Product Information:

**Inhalation:** May cause irritation of respiratory tract.

**Eye Contact:** Causes serious eye irritation.

**Skin Contact:** Causes skin irritation.

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

**Unknown Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.

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

**ATEmix (oral):** 1,864.00 mg/kg

Skin Corrosion or IrritationSee also section 3.Serious Eye Damage or Eye IrritationSee also section 3.SensitizationSee also section 3.Mutagenic effectsSee also section 3.

Carcinogenicity The table below indicates whether each agency has listed any

ingredient as a carcinogen.

**Reproductive Toxicity** 

Ingredients	EU - GHS - SV - CLP (1272/2008) - Reproductive Toxicity		
Boric Acid; H₃BO₃	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May		
	damage the unborn child. (C >= 5.5 %)		
Teratogenicity	No known effects under normal use conditions.		
STOT - Single Exposure-Category 3 (H335)	No known effects under normal use conditions.		
STOT - Repeated Exposure	None under normal use conditions.		
Aspiration Hazard	None under normal use.		

## Section 12: ECOLOGICAL INFORMATION

## 12.1. Toxicity

Do not allow product to enter the environment uncontrolled.

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	Algae/aquatic plants	Fish	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	115 - 153: 48 h Daphnia magna
		mg/L LC50 flow-through	mg/L EC50

#### 12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Component	LOGPOW
Nitric acid ammonium calcium salt	0
15245-12-2 ( 10 - 30% )	
Boric Acid; H₃BO₃	-0.757
10043-35-3 ( 0.1 - 1% )	

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

No data available.

## 12.6. Other adverse effects

No data available

## **Section 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

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

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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waste.

## **Section 14: TRANSPORT INFORMATION**

Hazchem code: 1Z

IMO / IMDG 14.1

UN-No: 1486

14.2

Proper shipping name: Potassium nitrate Mixture

14.3

**Hazard Class:** 5.1

14.4

Packing group: Ш

14.5

**Marine Pollutant:** No information available

14.6

F-A / S-Q EmS: **Special Provisions** 964, 967

14.7

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

and the IBC Code

ADR/RID

14.1 1486 UN-No:

14.2

Potassium nitrate Mixture Proper shipping name:

14.3

5.1 **Hazard Class:** 

14.4

Packing group: Ш

14.5

**Environmental Hazard** Not regulated

14.6

**Special Provisions** None Ε **Tunnel restriction code** 

**Peters Excel CalMag Finisher** 

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Limited Quantity 5 kg

IATA

<u>14.1</u> UN-No: 1486

14.2

Proper shipping name: Potassium nitrate Mixture

14.3

Hazard Class: 5.1

14.4

Packing group:

14.5

Environmental Hazard Not regulated

14.6

Special Provisions None



## **Section 15: REGULATORY INFORMATION**

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

#### **REACH:**

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% )	

No data available

## National regulations

<u>Belgium</u>

<u>Denmark</u>

Danish Sikkerhedsgruppe Not regulated

<u>France</u>

ICPE Classified installation: article 1230

<u>Germany</u>

Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

LGK (Germany) 5.1B

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

Component	German WGK Section	
Potassium Nitrate; KNO₃	class 1	
7757-79-1 ( 30 - 60% )		
Ureaphosphate	class 1	
4861-19-2 ( 10 - 30% )		
Boric Acid; H <sub>3</sub> BO <sub>3</sub>	class 1	
10043-35-3 ( 0.1 - 1% )		
Copper-EDTA; Cu-EDTA	class 2	
14025-15-1 ( 0.1 - 1% )		

## **European Union**

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

#### 15.2 Chemical safety assessment

Not required. Substance(s) usage is covered according to Reach regulation 1907/2006.

## **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

H314 - Causes severe skin burns and 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 statement: CLP (EU) specific hazard statement.

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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**End of Safety Data Sheet**