Safety Data Sheet

Issue Date: 14-Nov-2013 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 21540215AU

Product Name: Peters Excel Hard Water Grow Special **Synonyms:** Peters Excel 18-4.4-14.9+1.2Mg+TE

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

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

Manufacturer

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

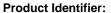
2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008

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







Signal Word:

Warning

Hazard Statements:

H319 - Causes serious eye irritation

H315 - Causes skin irritation

H272 - May intensify fire; oxidizer

Contains Ureaphosphate

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

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

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

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

P220 - Keep/Store away from clothing/ combustible materials

P501 - Dispose of container in accordance with local regulation

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; KNO ₃	231-818-8	7757-79-1	30 - 60%	Ox. Sol. 3 (H272)	01-2119488224-35
Ureaphosphate	225-464-3	4861-19-2	10 - 30%	Skin Corr. 1B (H314)	01-2119489460-34
Ammonium Nitrate; NH ₄ NO ₃	229-347-8	6484-52-2	10 - 30%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Magnesium nitrate hexahydrate; Mg(NO₃)₂+6H₂O	233-826-7	13446-18-9	10 - 30%	Eye Irrit. 2 (H319)	01-2119491164-38
Boric Acid; H ₃ BO ₃	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.

In the case of inhalation of aerosol/mist consult a physician if necessary. Possible

symptoms are coughing and/or dyspnoea. If symptoms persist, call a physician.

Skin Contact: Rinse with plenty of water. If a person feels unwell or symptoms of skin irritation appear,

consult a physician.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep

eye wide open while rinsing. Continue rinsing eyes during transport to hospital.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting

without medical advice. Possible symptoms are nausea and/or vommiting. If a person vomits when lying on his back, place him in the recovery position. Never give anything by

mouth to an unconscious person.

Protection of First-Aiders: 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:

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.

5.3. Advice for firefighters

Coordinate fire extinguishing measures to fire in surrounding area.

Hazchem code:

1Y

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: Avoid dust formation. Ensure adequate ventilation. Sweep-up to prevent slipping hazard.

Avoid contact with eyes.

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.

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 ³		
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA		
Latvia - Occupational Exposure Limits - TWAs	5 mg/m³ TWA		
Ammonium Nitrate; NH4NO₃			
Australia TWA	N.A.		
Czech Republic OEL	10.0 mg/m³ TWA		

Boric Acid; H₃BO₃	
Australia TWA	12 mg/m³
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)
German mak	TWA: 10 mg/m ³
	Ceiling / Peak: 10 mg/m ³
	TWA: 0.5 mg/m ³
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Portugal	STEL: 6 mg/m ³
	TWA: 2 mg/m ³
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m ³
	TWA: 2 mg/m ³
Switzerland	STEL: 10 mg/m ³
	TWA: 10 mg/m ³
Copper-EDTA; Cu-EDTA	
Austria	STEL 4 mg/m ³
	STEL 0.4 mg/m ³
	TWA: 1 mg/m ³
	TWA: 0.1 mg/m³
Australia TWA	N.A.
Finland	TWA: 1 mg/m ³

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 adequate ventilation, especially in confined areas.

Exposure:

Personal protective equipment

Eye/Face Protection: Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing

problems.

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

Respiratory Protection: Effective dust mask.

Skin and Body Protection: Wear suitable 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: 1100 - 1200 kg/m³

pH: 2.5 (@ 200 g/l)

Melting Point/Freezing Point: no data available

Boiling Point/Range: Solid, Not Applicable

Flash Point: Solid, Not Applicable

Evaporation Rate: Solid, Not Applicable

Flammability (solid, gas): Non-flammable

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

Strong oxidizing agents. Acids and bases. Strong reducing agents. Flammable 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.

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.

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

reproductive restory			
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
Ammonium Nitrate; NH ₄ NO ₃	65 - 85: 48 h Cyprinus carpio		
		mg/L LC50 semi-static	
Boric Acid; H ₃ BO ₃		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
Ammonium Nitrate; NH₄NO₃	-3.1
6484-52-2 (10 - 30%)	
Boric Acid; H ₃ BO ₃	-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 of Wastes:

Disposal should be in accordance with applicable regional,

national and local laws and regulations.

Contaminated Packaging:

Other Information:

Do not re-use empty containers. Dispose of as unused product. Use up product completely. Packaging material is industrial

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waste.

Section 14: TRANSPORT INFORMATION

Hazchem code:

IMO / IMDG

1Y

14.1

UN-No: 1479

14.2

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

14.3

Hazard Class: 5.1

14.4

Packing group: 14.5

Marine Pollutant: Not regulated

14.6

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

Special Provisions 14.7

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code

Not regulated

PG III

ADR/RID

<u>14.1</u> UN-No: 1479

14.2

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

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14.3

Hazard Class: 5.1

14.4

PG III Packing group:

14.5

Not regulated **Environmental Hazard**

14.6

Special Provisions 274 **Tunnel restriction code**

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

IATA

14.1 1479 UN-No:

14.2

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

14.3

Hazard Class: 5.1

<u>14.4</u>

PG III Packing group:

14.5

Environmental Hazard Not regulated

Special Provisions АЗ



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
Ammonium Nitrate; NH ₄ NO ₃	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
6484-52-2 (10 - 30%)	
Boric Acid; H ₃ BO ₃	Use restricted. See item 30.
10043-35-3 (0.1 - 1%)	

No data available

National regulations

Relaium

Component	Belgium - Major Accidents - Qualifying	Belgium - Major Accidents - Qualifying
	Quantities for Safety Reporting	Quantities for Accident Prevention
Ammonium Nitrate; NH₄NO₃	2500 tonne (Note 3, applies to Ammonium	350 tonne (Note 3, applies to Ammonium
6484-52-2 (10 - 30%)	nitrate in which the Nitrogen content due to	nitrate in which the Nitrogen content due to
	Ammonium nitrate is >28% by weight	Ammonium nitrate is >28% by weight
	containing <=0.2 % combustible material,	containing <=0.2 % combustible material,
	>24.5% and <28% by weight containing	>24.5% and <28% by weight containing
	<=0.4% combustible material and to	<=0.4% combustible material and to aqueous
	aqueous Ammonium nitrate solutions in	Ammonium nitrate solutions in which the
	which the concentration of Ammonium nitra	te concentration of Ammonium nitrate is >80%
	is >80% by weight)	by weight)

<u>Denmark</u>

Danish Sikkerhedsgruppe

Not regulated

<u>France</u>

ICPE Classified installation: article 1331, 1230

Germany

Gefahrstoffverordnung (Germany) TRGS 511 C III LGK (Germany) 5.1B

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

Component	German WGK Section	
Potassium Nitrate; KNO ₃ 7757-79-1 (30 - 60%)	class 1	
Ureaphosphate 4861-19-2 (10 - 30%)	class 1	
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (10 - 30%)	class 1	
Boric Acid; H ₈ BO ₃ 10043-35-3 (0.1 - 1%)	class 1	
Copper-EDTA; Cu-EDTA 14025-15-1 (0.1 - 1%)	class 2	

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

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H316 - Causes mild skin irritation

H272 - May intensify fire; oxidizer

H360FD - May damage fertility. May damage the unborn child

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

Key literature references and sources for data

According to EC Regulation 1907/2006 (Reach), Regulation EU No. 2015/830. Regulation (EC) No 1272/2008.

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

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replaces all previous versions.

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

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End of Safety Data Sheet