Safety Data Sheet

Issue Date: 30-Dec-2013 Revision Date: 27-Jun-2016 Version: 1

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

1.1. Product identifier

Product Code 88520200AU

Product Name:Osmocote Exact Mini 5-6M 15-3.9-9.1+1.2Mg+TESynonyms:Osmocote Exact Mini 15-3.9-9.1+1.2Mg+TE

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

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

Chronic aquatic toxicity Category 3 - (H412)

2.2. Label elements

Product Identifier:

Signal Word:

None

Hazard Statements:

H412 - Harmful to aquatic life with long lasting effects

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

P501 - Dispose of container in accordance with local regulation

Other hazards (UN-GHS)

Toxic to aquatic life.

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
	229-347-8	6484-52-2	30 - 60%	Eye Irrit. 2 (H319)	01-2119490981-27
Ammonium Nitrate; NH4NO3				Ox. Sol. 3 (H272)	
_	231-753-5	7720-78-7	0.1 - 1%	Skin Irrit. 2 (H315)	01-2119513203-57

Iron sulphate; FeSO ₄ +1H ₂ O				Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	
Copper sulphate anh; CuSO ₄	231-847-6	7758-98-7	0.1 - 1%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119520566-40
Manganese sulphate; MnSO ₄ +1H ₂ O	232-08-99	7785-87-7	0.1 - 1%	STOT RE 2 (H373) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	01-2119456624-35
Sodium borate; Na ₂ B ₄ O ₇	215-540-4	1330-43-4	0.1 - 1%	Eye Irrit. 2 (H319) Repr. 1B (H360FD)	01-2119490790-32
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O	231-793-3	7446-19-7	< 0.1%	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119474684-27

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: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do not induce vomiting without medical advice.

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:

Water.

Unsuitable extinguishing media:

High volume water jet. Dry powder. Sand. Foam.

5.2. Special hazards arising from the substance or mixture

In case of fire, the product will smoulder even without the presence of external oxygen. In these conditions the product will show

self sustaining decomposition. The best method to extinguish the fire is to cool the decomposition front with water. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products:

Carbon oxides. Phosphorus oxides. Ammonia. Nitrogen oxides (NOx).

5.3. Advice for firefighters

Coordinate fire extinguishing measures to fire in surrounding area. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray to cool fire exposed surfaces.

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.

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

Ammonium Nitrate; NH4NO3		
Australia TWA	N.A.	
Czech Republic OEL	10.0 mg/m³ TWA	
Iron sulphate; FeSO4+1H2O		
Belgium - 8 Hr TWA	1 mg/m ³	
Denmark	TWA: 1 mg/m ³	
Finland	TWA: 1 mg/m ³	
Ireland	TWA: 1 mg/m ³	
	STEL: 2 mg/m ³	
Netherlands - OEL - MACs:	1 mg/m ³	
Norway	TWA: 1 mg/m ³	

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	STEL: 1 mg/m ³
Portugal	TWA: 1 mg/m ³
Spain OEL - Time Weighted Average (TWA):	TWA: 1 mg/m ³
Switzerland	TWA: 1 mg/m³
UK oes/mel:	TWA: 1 mg/m³
Copper sulphate anh; CuSO4	
Austria	STEL 4 mg/m ³
	STEL 0.4 mg/m ³
	TWA: 1 mg/m ³
	TWA: 0.1 mg/m ³
Australia TWA	N.A.
Finland	TWA: 1 mg/m ³
German mak	TWA: 0.01 mg/m ³
	Ceiling / Peak: 0.02 mg/m ³
Netherlands - OEL - MACs:	0.1 mg/kg TWA
Poland	TWA: 0.2 mg/m ³
Russia TWA	0.5 mg/m³ TWA 1200
Switzerland	STEL: 0.2 mg/m ³
	TWA: 0.1 mg/m ³
Manganese sulphate; MnSO4+1H2O	
Austria	STEL 2 mg/m ³
	TWA: 0.5 mg/m ³
Australia TWA	0.2 mg/m ³
Belgium - 8 Hr TWA	0.2 mg/m ³
Denmark	TWA: 0.2 mg/m ³
Finland	TWA: 0.02 mg/m³ TWA: 0.2 mg/m³
German mak	TWA: 0.2 mg/m ³
German mak	TWA: 0.2 mg/m ³
	Ceiling / Peak: 1.6 mg/m³
	Ceiling / Peak: 0.16 mg/m ³
	g a mag , a cam a mag
Ireland	TWA: 0.2 mg/m ³
	STEL: 0.6 mg/m ³
Netherlands - OEL - MACs:	1 mg/m³
Norway	TWA: 1 mg/m ³
	TWA: 0.1 mg/m³
	STEL: 1 ppm
Dalay J	STEL: 0.1 mg/m³
Poland	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³
Dowlers	TWA: 0.2 mg/m ³
Portugal	TWA: 0.2 mg/m³
Spain OEL - Time Weighted Average (TWA):	
Sweden - OEL - 8 Hour	0.2 mg/m³ LLV (totalt)
Switzerland	TWA: 0.5 mg/m ³
UK oes/mel:	TWA: 0.5 mg/m ³
Sodium borate; Na ₂ B ₄ O ₇	4 / 2 TIMA
Australia TWA	1 mg/m³ TWA
Belgium - 8 Hr TWA	2 mg/m³ TWA borate
Denmark OF	TWA: 1 mg/m³
Greece - OEL	10 mg/m³ TWA
Iceland - OEL - 8 Hour	1 mg/m³ TWA
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 1 mg/m³
Ireland	TWA: 1 mg/m³
	STEL: 3 mg/m ³
Korea - ISHA - Occupational Exposure Limits - TWAs	1 mg/m³ TWA (anhydrous, Serial No. 239)
Malaysia - Occupational Exposure Limits - 1 mg/m³ TWA	
TWAS	TIA/A · 4 · · · · · / · · · 3
Norway	TWA: 1 mg/m³ STEL: 3 mg/m³
Portugal	STEL: 3 mg/m³ STEL: 6 mg/m³
i Ortugal	TWA: 2 mg/m ³
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m³
Opani OLL - Time Weighted Average (TWA).	TWA: 2 mg/m ³
Switzerland	TWA: 2 mg/m ³
UK oes/mel:	STEL: 3 mg/m ³
or ocaliici.	TWA: 1 mg/m ³
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O	I I WAS I HIGHTI
Zine Sulphate Mono Hydrate, Zinso4+ Hizo	

German mak	TWA: 0.1 mg/m³ TWA: 2 mg/m³
	Ceiling / Peak: 0.4 mg/m³
	Ceiling / Peak: 4 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

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:SolidAppearance:GranulesColor:brown.

Not significant Odor: **Bulk density:** no data available no data available pH: **Melting Point/Freezing Point:** no data available **Boiling Point/Range:** Solid, Not Applicable Flash Point: Solid, Not Applicable **Evaporation Rate:** Solid, Not Applicable Non-flammable Flammability (solid, gas): Vapor Pressure: Solid, Not Applicable

Vapor Pressure:Solid, Not ApplicableVapor Density:Solid, Not ApplicableSpecific Gravity:no data availableWater Solubility:Soluble in waterSolubility(ies)no data availablePartition Coefficient:Solid, Not ApplicableAutoignition Temperature:Not ApplicableDecomposition Temperature:no data available

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

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

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: May cause irritation. **Skin Contact:** May cause irritation.

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

Unknown Acute Toxicity: 15% 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

Ingredients	EU - GHS - SV - CLP (1272/2008) - Reproductive Toxicity	
Sodium borate; Na ₂ B ₄ O ₇	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May	
	damage the unborn child. (C >= 4.5 %)	
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

Harmful to aquatic life with long lasting effects.

15% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	Algae/aquatic plants	Fish	Crustacea
Ammonium Nitrate; NH₄NO₃		65 - 85: 48 h Cyprinus carpio	
		mg/L LC50 semi-static	
Iron sulphate; FeSO ₄ +1H ₂ O		925: 96 h Poecilia reticulata mg/L	152: 48 h Daphnia magna mg/L
		LC50 static 0.56: 96 h Cyprinus	EC50 6.15 - 9.26: 48 h Daphnia
		carpio mg/L LC50 semi-static	magna mg/L EC50 Static
Copper sulphate anh; CuSO ₄		0.1: 96 h Oncorhynchus mykiss	0.024: 48 h Daphnia magna mg/L
		mg/L LC50	EC50
Sodium borate; Na ₂ B ₄ O ₇	158: 96 h Desmodesmus	340: 96 h Limanda limanda mg/L	1085 - 1402: 48 h Daphnia magna
	subspicatus mg/L	LC50	mg/L LC50

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Component	LOGPOW	

Ammonium Nitrate; NH₄NO₃	-3.1
6484-52-2 (30 - 60%)	

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.

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

IMO / IMDG

14.1

UN-No: 2071

14.2

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

14.3

Hazard Class:

14.4

Packing group: PG III

14.5

Component **IMDG - Marine Pollutants**

Copper sulphate anh; CuSO4 IMDG regulated marine pollutant (Listed in the index, 7758-98-7 (0.1 - 1%) listed under Copper sulphate, anhydrous, hydrates and solution)

Marine Pollutant: This product contains a chemical which is listed as a marine

pollutant according to IMDG/IMO

14.6 F-H/S-Q EmS:

Special Provisions 186, 193 14.7

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

and the IBC Code

ADR/RID

14.1 UN-No: 2071

14.2

AMMONIUM NITRATE BASED FERTILIZER Proper shipping name:

14.3 **Hazard Class:** 9 14.4 Packing group: Ш

Environmental Hazard Not regulated

14.6

Special Provisions None

IATA

14.5

<u>14.1</u>

UN-No: 14.2

Proper shipping name:

14.3

Hazard Class:

14.4

Packing group:

14.5

Environmental Hazard

14.6

Special Provisions



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9

PG III

Not regulated

A89, A90

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; NH4NO3	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
6484-52-2 (30 - 60%)	
Sodium borate; Na ₂ B ₄ O ₇	Use restricted. See item 30.
1330-43-4 (0.1 - 1%)	

No data available

National regulations

<u>Belgium</u>

Component	Belgium - Major Accidents - Qualifying	Belgium - Major Accidents - Qualifying
	Quantities for Safety Reporting	Quantities for Accident Prevention
Ammonium Nitrate; NH ₄ NO ₃	2500 tonne (Note 3, applies to Ammonium	350 tonne (Note 3, applies to Ammonium
6484-52-2 (30 - 60%)	nitrate in which the Nitrogen content due to	nitrate in which the Nitrogen content due to
		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 nitrate	concentration of Ammonium nitrate is >80%
	is >80% by weight)	by weight)

Denmark

Danish Sikkerhedsgruppe B

<u>France</u>

ICPE Not regulated

Germany

Germany	
Component	German WGK Section
Ammonium Nitrate; NH ₄ NO ₃	class 1
6484-52-2 (30 - 60%)	
Iron sulphate; FeSO ₄ +1H ₂ O	class 1
7720-78-7 (0.1 - 1%)	
Copper sulphate anh; CuSO ₄	class 2
7758-98-7 (0.1 - 1%)	

Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7 (0.1 - 1%)	class 1
Sodium borate; Na ₂ B ₄ O ₇	class 1
1330-43-4 (0.1 - 1%)	
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O	class 3
7446-19-7 (< 0.1%)	

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

H272 - May intensify fire; oxidizer

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H315 - Causes skin irritation

H411 - Toxic to aquatic life with long lasting effects

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