Safety Data Sheet

Issue Date 12-Feb-2014 Version: 2

Section 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name Osmocote Exact Standard 8-9M

88420225AU **Product ID**

Other means of identification

Proper shipping name AMMONIUM NITRATE BASED FERTILIZER

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer (PC12). Restricted to professional users.

Details of manufacturer or importer

Manufacturer

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

E-mail address INFO-MSDS@EVERRIS.COM

Emergency telephone number Australia: (02) 8014 4558

New Zealand: (09) 9929 1483

Section 2: HAZARD(S) IDENTIFICATION

GHS Classification

Mixture

Not a hazardous substance or mixture in Australia or New Zealand according to the Globally Harmonized System of classification.

Label elements

Hazard statements

Not a hazardous substance or mixture in Australia or New Zealand according to the Globally Harmonized System of classification.

Other hazards which do not result in classification

No hazards to be especially mentioned

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS IN ACCORDANCE WITH **SCHEDULE 8**

Substance

Chemical name	CAS No	EC No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ammonium nitrate; NH ₄ NO ₃	6484-52-2	229-347-8	30 - 60%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Iron sulphate; FeSO ₄ +1H ₂ O	7720-78-7	231-753-5	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119513203-57

Copper sulphate anhydrous; CuSO ₄	7758-98-7	231-847-6	0.1 - 1%	Skin irrit. 2 (H319) Eye irrit. 2 (H315) Acute Tox. 4 (H302) Aquatic Chronic 1 (H410)	01-2119520566-40
Manganese sulphate; MnSO ₄ +1H ₂ O	7785-87-7	232-089-9	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	1330-43-4	215-540-4	0.1 - 1%	Eye Irrit. 2 (H319) Repr. 1B (H360FD)	01-2119490790-32

57% of the other ingredients are determined not be hazardous.

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice First aid measures should be executed by trained personnel only.

Inhalation Remove to fresh air. 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.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin Contact Wash skin with soap and water. Get medical attention if irritation develops and persists.

Ingestion Clean mouth with water and drink afterwards plenty of water. Possible symptoms are

nausea and/or vomiting. 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.

Most important symptoms and effects, both acute and delayed

Symptoms no data available.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

Section 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media CO2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams. Dry chemical. Foam.

Hazardous Combustion Products Carbon oxides. Phosphorus oxides. Ammonia. Nitrogen oxides (NOx).

Special protective actions for fire-fighters

Special protective equipment for

Coordinate fire extinguishing measures to fire in surrounding area.

fire-fighters

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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Personal precautions Ensure adequate ventilation. Avoid generation of dust.

Environmental precautions

Environmental precautionsDo not flush into surface water or sanitary sewer system. Prevent product from entering

drains. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

Section 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Use personal protection equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container closed when not in use. Keep in a dry, cool and well-ventilated

place. Protect from sunlight.

Incompatible materialsNone known based on information supplied.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Copper sulphate anhydrous; CuSO ₄			
Australia	N.A.		
Manganese sulphate; MnSO ₄ +1H ₂ O			
Australia	0.2 mg/m ³		
Sodium borate; Na ₂ B ₄ O ₇			
Australia	1 mg/m³ TWA		

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection No special protective equipment required.

Skin and body protection: No special protective equipment required.

Hand Protection Nitrile rubber. Break though time >8h.

Environmental exposure controls no data available.

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid Appearance: Granules Color: brown Odor: Fertilizer.

Odor Threshold: No data available

pН No data available **Melting Point/Freezing Point:** No data available **Boiling Point/Range:** No data available Flash Point: No data available **Evaporation Rate:** no data available Flammability (solid, gas): Non-flammable **Vapor Pressure:** No data available Vapour density No data available Water Solubility: no data available **Partition Coefficient:** no data available **Autoignition Temperature:** No data available Hyphen no data available No data available **Kinematic Viscosity: Dynamic Viscosity:** no data available

Other information

Softening Point: no data available no data available **Molecular Weight:** No data available **VOC Content (%)**

Particle Size

Particle Size Distribution

Section 10: STABILITY AND REACTIVITY

Reactivity Not reactive.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous Decomposition

Products:

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

Conditions to Avoid:

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly Conditions to avoid

used bags should be closed well.

Incompatible materials

None known based on information supplied. Incompatible materials

Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact May cause redness, itching, and pain.

Skin Contact May cause irritation.

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

Symptoms no data available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium nitrate; NH ₄ NO ₃	= 2217 mg/kg (Rat)	> 5000 mg/kg	> 88.8 mg/L (Rat) 4 h
Iron sulphate; FeSO ₄ +1H ₂ O	= 500 mg/kg (Rat)	-	.?
Copper sulphate anhydrous; CuSO ₄	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	.?
			(() ()
Manganese sulphate; MnSO ₄ +1H ₂ O	= 2125 mg/kg (Rat)	-	> 4.98 mg/L (Rat) 4h
Sodium borate; Na ₂ B ₄ O ₇	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2 mg/m³ (Rat) 4 h

See section 16 for terms and abbreviations

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

skin corrosion/irritation Classification based on individual ingredients of the mixture.

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 ExposureClassification based on individual ingredients of the mixture.

Aspiration Hazard Classification based on individual ingredients of the mixture.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Do not allow product to enter the environment uncontrolled.

Unknown aquatic toxicity 8 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Iron sulphate; FeSO ₄ +1H ₂ O	-	LC50: =0.56mg/L (96h, Cyprinus carpio) LC50: =925mg/L (96h,	-	EC50: 6.15 - 9.26mg/L (48h, Daphnia magna) EC50: =152mg/L (48h,
		Poecilia reticulata)		Daphnia magna)
Copper sulphate	-	LC50: =0.1mg/L (96h,	-	0.024: 48 h Daphnia
anhydrous; CuSO4		Oncorhynchus mykiss)		magna mg/L EC50
Sodium borate; Na ₂ B ₄ O ₇	158: 96 h Desmodesmus	LC50: =340mg/L (96h,	-	LC50: 1085 - 1402mg/L
	subspicatus mg/L	Limanda limanda)		(48h, Daphnia magna)

Persistence and degradability

Persistence and Degradability: no data available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil no data available.

Mobility no data available.

Chemical name	Partition coefficient
Ammonium nitrate; NH₄NO₃	-3.1

Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

ADG Not regulated

IATA

UN number or ID number 2071

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

Transport hazard class(es)

Packing group

Special Provisions

9

III

A89, A90

<u>IMDG</u>

UN number or ID number 2071

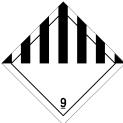
Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

Transport hazard class(es) 9
Packing group:

EmS: F-H / S-Q
Special Provisions 186, 193
Marine Pollutant: Not regulated

Bulk transport according Annex II of MARPOL and IBC Code

no data available



Section 15: REGULATORY INFORMATION

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

National regulations

New Zealand:

Hazardous Substances Regulations

Australia

See section 8 for national exposure control parameters

Not regulated

International Inventories:

TSCA This product complies with USINV ENCS This product complies with encs:

Australian Inventory of Chemical Substances

This product does not comply with AICS

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

AICS - Australian Inventory of Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applied

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: ANY OTHER RELEVANT INFORMATION

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

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Revision Note Not applied

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

ADG: Australian Dangerous Goods code

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.

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Disclaimer

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End of Safety Data Sheet