

Safety Data Sheet

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Version: 10

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

1.1. Product identifier

Product Name Osmocote Exact Tablet (7.5 grams) 5-6M; 14-8-11+2MgO+TE
Product Code: 66800275EC
Synonyms: Osmocote Exact Tablet 14-3.5-9.1+1.2Mg+TE
Pure substance/mixture Mixture.

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

Recommended Use Fertilizer (PC12). Restricted to professional users.
Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

Everris International B.V. 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 (CLP)

Chronic aquatic toxicity	Category 3 - (H412)
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2.2. Label elements

Hazard Statements:

H412 - Harmful to aquatic life with long lasting effects

Other hazards (UN-GHS)

Toxic to aquatic life

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according Regulation (EC) 1272/2008 [CLP]	REACH registration number
Ammonium nitrate; NH ₄ NO ₃	229-347-8	6484-52-2	25 - 40%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Poly ethylene glycol; PEG	500-038-2	25322-68-3	5 - 10%	Not classified	Exempt
Calcium sulphate dihydrate; CaSO ₄ +2H ₂ O	231-900-3	10101-41-4	1 - 5%	Not classified	01-2119444918-26
Iron sulphate; FeSO ₄ +1H ₂ O	231-753-5	7720-78-7	0.1 - 1%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119513203-57
Copper sulphate anhydrous; CuSO ₄	231-847-6	7758-98-7	0.1 - 1%	Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	01-2119520566-40

				Aquatic Chronic 1 (H410)	
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

Component	SVHC candidates
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (0.1 - 1%)	Present

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 Not applied. Dusty conditions are unlikely if product is used as intended and product-coating remains intact. However, if prolonged inhalation of dust occurs, remove victim to fresh air.

Skin Contact: If a person feels unwell or symptoms of skin irritation appear, consult a physician.

Eye Contact: If eye irritation persists, consult a specialist.

Ingestion: Rinse mouth. Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person.

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

None under normal processing

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

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 (NO_x).

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.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: No conditions to be specially mentioned.
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: Use up product completely. Packaging material is industrial waste.

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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions: For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well. Keep at temperatures between 0 °C and 40 °C. Store in original container. Store in a closed container.
Packaging Materials: PGS-7 (The Netherlands) 2/B
LGK (Germany) 5.1C

7.3. Specific end use(s)

Specific use(s): Fertilizer; www.everris.com; Read and follow label instructions
Exposure scenario: Mixture. Not required.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<i>Ammonium nitrate; NH₄NO₃</i>	
Australia	N.A.
Czech Republic OEL	10.0 mg/m ³ TWA
<i>Poly ethylene glycol; PEG</i>	
Austria	STEL 4000 mg/m ³ TWA: 1000 mg/m ³
Denmark	TWA: 1000 mg/m ³
Slovenia - OEL - TWAs	1000 mg/m ³ TWA (average MW 200-400, inhalable fraction)
Switzerland	TWA: 1000 mg/m ³
<i>Calcium sulphate dihydrate; CaSO₄+2H₂O</i>	
Belgium - 8 Hr TWA	10 mg/m ³ TWA
Portugal	TWA: 10 mg/m ³
Spain - Valores Limite Ambientales - VLE	TWA: 10 mg/m ³
Switzerland	TWA: 3 mg/m ³
UK EH40 WEL (8h)	10 mg/m ³ TWA (Inhalable) 4 mg/m ³ TWA (Respirable)
<i>Iron sulphate; FeSO₄+1H₂O</i>	
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
Norway	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Portugal	TWA: 1 mg/m ³

Spain - Valores Limite Ambientales - VLE	TWA: 1 mg/m ³
Switzerland	TWA: 1 mg/m ³
UK EH40 WEL (8h)	LTEL (8 hr TWA) 1 mg/m ³ STEL (15 min) 2mg/m ³
<i>Copper sulphate anhydrous; CuSO₄</i>	
Austria	STEL 4 mg/m ³ TWA: 1 mg/m ³
Australia	N.A.
Finland	TWA: 0.02 mg/m ³
Poland	TWA: 0.2 mg/m ³
Russia TWA	0.5 mg/m ³ TWA 1258
Switzerland	STEL: 0.2 mg/m ³ TWA: 0.1 mg/m ³
<i>Manganese sulphate; MnSO₄+1H₂O</i>	
Austria	STEL 2 mg/m ³ TWA: 0.5 mg/m ³
Australia	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/m ³ TWA: 0.2 mg/m ³
Ireland	TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³
Japan	0.2 mg/m ³ OEL Mn
NL MAC - TWA:	STEL: 0.05 mg/m ³ TWA: 0.2 mg/m ³
Norway	TWA: 0.1 mg/m ³ STEL: 0.1 ppm
Poland	TWA: 0.05 mg/m ³
Portugal	TWA: 0.2 mg/m ³
Spain - Valores Limite Ambientales - VLE	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³
Switzerland	TWA: 0.5 mg/m ³
UK EH40 WEL (8h)	5 mg/m ³
<i>Sodium borate; Na₂B₄O₇</i>	
Australia	1 mg/m ³ TWA
Belgium - 8 Hr TWA	2 mg/m ³ TWA borate
Denmark	TWA: 1 mg/m ³
FR - OEL - 8h VMEs	TWA: 1 mg/m ³
Iceland - OEL - 8 Hour	1 mg/m ³ TWA
Ireland	TWA: 1 mg/m ³ STEL: 3 mg/m ³
Korea - ISHA - OEL - TWAs	1 mg/m ³ TWA (anhydrous, Serial No. 244)
Malaysia	1 mg/m ³ TWA
Norway	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Portugal	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Spain - Valores Limite Ambientales - VLE	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Singapore - OEL:PELs	1 mg/m ³ PEL
Switzerland	STEL: 0.8 mg/m ³
UK EH40 WEL (8h)	1 mg/m ³ TWA

Derived No Effect Level (DNEL)

Component	Oral	Dermal	Inhalation
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2 (25 - 40%)	36 mg/m ³	5.12 mg/kg bw/day	8.9 mg/m ³
Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7 (0.1 - 1%)	37.6 mg/m ³	0.004 mg/kg bw/day	0.2 mg/m ³

Predicted No Effect Concentration (PNEC)

No data available

Component	Fresh Water	Freshwater	Sea Water	Sea sediment	Soil	Impact on
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		sediment				Sewage Treatment
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2 (25 - 40%)						18 mg/l
Copper sulphate anhydrous; CuSO ₄ 7758-98-7 (0.1 - 1%)	7.8 µg/l	87 mg/kg	5.2 µg/l	676 mg/kg	65 mg/kg	230 µg/l
Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7 (0.1 - 1%)	0.013 mg/l	0.011 mg/kg	0 mg/l	0.001 mg/kg	25.1 mg/kg	25.1 mg/kg

8.2. Exposure controls

Personal protective equipment

Eye/Face Protection

Wear eye/face protection

Hand protection

Gloves. Nitrile rubber (0.26 mm). Break through time. > 8 h.

Respiratory Protection

Not required; except in case of aerosol formation. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State:

Solid

Appearance:

Granules

Color:

brown.

Odor:

None

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):

Not flammable

Vapor Pressure:

Solid. Not applicable.

Vapour density

Solid. Not applicable.

Relative density

No data available

Water Solubility:

No data available

Solubility(ies)

No data available

Partition Coefficient:

Solid. Not applicable.

Autoignition Temperature:

No data available

Decomposition temperature:

No data available

Explosive Properties:

Doesn't present explosion hazard.

9.2. Other information

VOC Content (%):

Solid. 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

No special storage conditions required.

10.5. Incompatible materials

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity
Unknown Aquatic Toxicity

Should not be released into the environment
7% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ammonium nitrate; NH ₄ NO ₃	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Poly ethylene glycol; PEG	-	5000: 24 h Carassius auratus mg/L LC50	-	-
Iron sulphate; FeSO ₄ +1H ₂ O	-	925: 96 h Poecilia reticulata mg/L LC50 static 0.56: 96 h Cyprinus carpio mg/L LC50 semi-static	-	152: 48 h Daphnia magna mg/L EC50 6.15 - 9.26: 48 h Daphnia magna mg/L EC50 Static
Copper sulphate anhydrous; CuSO ₄	-	0.1: 96 h Oncorhynchus mykiss mg/L LC50	-	0.024: 48 h Daphnia magna mg/L EC50
Sodium borate; Na ₂ B ₄ O ₇	158: 96 h Desmodesmus subspicatus mg/L	340: 96 h Limanda limanda mg/L LC50	-	1085 - 1402: 48 h Daphnia magna mg/L LC50

12.2. Persistence and degradability

Persistence and Degradability:

No persistent or cumulative effects were observed.

12.3. Bioaccumulative potential

Bioaccumulation:

Does not bioaccumulate.

Chemical Name	LOGPOW
Ammonium nitrate; NH ₄ NO ₃	-3.1

12.4. Mobility in soil

No data available.

12.5. 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:

Do not reuse container.

Other Information

Use up product completely. Packaging material is industrial 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:

9

14.4

Packing group: III

14.5

Chemical Name	IMDG - Marine Pollutants
Copper sulphate anhydrous; CuSO ₄ 7758-98-7 (0.1 - 1%)	IMDG regulated marine pollutant (Listed in the index, listed under Copper sulphate, anhydrous, hydrates and solution)

Marine Pollutant: Not regulated

14.6

EmS: F-H / S-Q

Special Provisions 186, 193

14.7

Bulk transport according Annex II of MARPOL and IBC Code No data available

ADR/RID

14.1

UN-No: Not regulated

14.2

Proper shipping name: Not regulated

14.3

Hazard Class: Not regulated

14.4

Packing group: Not regulated

14.5

Environmental Hazard Not regulated

14.6

Special Provisions None

IATA

14.1

UN-No: 2071

14.2

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

14.3

Hazard Class: 9

14.4

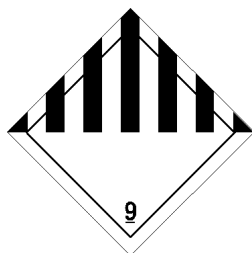
Packing group: III

14.5

Environmental Hazard Not regulated

14.6

Special Provisions A89, A90



Section 15: REGULATORY INFORMATION

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

Belgium

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
Ammonium nitrate; NH ₄ NO ₃	2500 tonne (technical grade; (a) this applies	350 tonne

6484-52-2 (25 - 40%)	to Ammonium nitrate in which the Nitrogen content as a result of Ammonium nitrate is (i) between 24.5% and 28% by weight and which contain <=0.4% total combustible or (ii) >28% by weight and which contain <=0.2% combustible substances (b) aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate is >80% by weight)	
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Denmark

Denmark B

France

ICPE Classified installation: article 1331 (Type I)

Germany

LGK (Germany) 5.1C
Water Endangering Class (WGK): 1 (Everris classification)
Gefahrstoffverordnung (Germany) TRGS 511 BII

Component	German WGK Section
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2 (25 - 40%)	1
Poly ethylene glycol; PEG 25322-68-3 (5 - 10%)	1
Calcium sulphate dihydrate; CaSO ₄ +2H ₂ O 10101-41-4 (1 - 5%)	1
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7 (0.1 - 1%)	1
Copper sulphate anhydrous; CuSO ₄ 7758-98-7 (0.1 - 1%)	2
Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7 (0.1 - 1%)	2
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (0.1 - 1%)	1

Component	EU - Explosives Precursors Marketing and Use (98/2013) - Substances Subject to Suspicious Transactions Reporting	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2 (25 - 40%)	Present (in concentration of 16% by weight of Nitrogen in relation to Ammonium nitrate or higher)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (0.1 - 1%)		Use restricted. See item 30.

Component	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (0.1 - 1%)	Reason for inclusion Toxic for reproduction, Article 57c (215-540-4)

15.2 Chemical safety assessment

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

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

Chemical Name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Ammonium nitrate; NH ₄ NO ₃	Use restricted. See item 58.	
Sodium borate; Na ₂ B ₄ O ₇	Use restricted. See item 30.	

Chemical Name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Ammonium nitrate; NH ₄ NO ₃	350	2500

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
- H373 - May cause damage to the kidneys/ liver/ eyes/ brain/ digestive system/ central nervous system through prolonged or repeated exposure if swallowed
- 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 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

Key literature references and sources for data

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

Prepared by

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

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Restrictions on use

Restricted to professional users

Reason for revision

*** Indicates changes since the last revision. This version replaces all previous versions

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