Safety Data Sheet

Issue Date 12-Mar-2014 **Revision Date** 19-Aug-2019 **Version:** 1

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

1.1. Product identifier

Product Name:	**Osmocote 5 16-8-12+2.2MgO+TE; 12-14M**
Product Code:	**88780225EA**
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

Manufacturer

Everris International BVNijverheidsweg 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)

Eye Irritation	Category 1 - (H318)

2.2. Label elements

Signal Word:

Danger

Hazard Statements:

H318 - Causes serious eye damage

Contains Potassium sulphate; K_2SO_4

Precautionary Statements:

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ammonium Nitrate; NH_4NO_3	229-347-8	6484-52-2	40 - 65%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Potassium sulphate; K_2SO_4	231-915-5	7778-80-5	5 - 10%	Eye Dam. 1 (H318)	01-2119489441-34

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 Dusty conditions are unlikely if product is used as intended. However, if prolonged inhalation of dust occurs, remove casualty to fresh air. If symptoms persist, call a physician.

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

Eye Contact: Rinse eyes with water as a precaution. If eye irritation persists, consult a specialist.

Ingestion: If conscious, drink plenty of water. Do NOT induce vomiting. Rinse mouth. Consult a physician if necessary.

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 (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.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

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.

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: Keep away from heat and sources of ignition. 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 packaging should be closed well.

PGS-7 (The Netherlands) 2/B
LGK (Germany) 5.1C
Packaging Materials: Store in original container. Store in a closed container.

7.3. Specific end use(s)

Specific use(s) Fertilizer; www.everris.com; Read and follow label instructions
Exposure scenario Not required. Mixture.
Other Information: See section 10

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ammonium Nitrate; NH_4NO_3	
Australia	N.A.
Czech Republic OEL	10.0 mg/m³ TWA
Potassium sulphate; K_2SO_4	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA

Derived No Effect Level (DNEL)

Component	Oral	Dermal	Inhalation
Ammonium Nitrate; NH_4NO_3 6484-52-2 (40 - 65%)	36 mg/m³	5.12 mg/kg bw/day	8.9 mg/m³
Potassium sulphate; K_2SO_4 7778-80-5 (5 - 10%)		21.3 mg/kg bw/day	37.6 mg/m³

Predicted No Effect Concentration (PNEC)

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage Treatment
Ammonium Nitrate; NH_4NO_3 6484-52-2 (40 - 65%)						18 mg/l
Potassium sulphate; K_2SO_4 7778-80-5 (5 - 10%)	0.68 mg/l		0.068 mg/l			10 mg/l

8.2. Exposure controls

Personal protective equipment

Eye/Face Protection:	Tightly fitting safety goggles
Hand protection:	Nitrile rubber (0.26 mm). Break through time. > 8 h.
Respiratory Protection:	No personal respiratory protective equipment normally required
Skin and body protection	Wear normal, light working 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, Greenish.
Odor:	None
Bulk density:	900 - 1100 kg/m^3
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

Keep away from open flames, hot surfaces and sources of ignition.

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

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Causes serious eye damage.

Skin Contact May cause irritation.

Ingestion May cause gastrointestinal discomfort if consumed in large amounts.

Information on Toxicological Effects:
Symptoms: No information available
Unknown Acute Toxicity: 0% of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH_4NO_3	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat) 4 h
Potassium sulphate; K_2SO_4	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	N.E.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:
None known

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 Exposure Classification based on individual ingredients of the mixture.

Aspiration Hazard Classification based on individual ingredients of the mixture.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity Should not be released into the environment
Unknown Aquatic Toxicity: 9% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ammonium Nitrate; NH_4NO_3	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Potassium sulphate; K_2SO_4	2900: 72 h Desmodesmus subspicatus mg/L EC50	653: 96 h Lepomis macrochirus mg/L LC50 3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas mg/L LC50 static	-	890: 48 h Daphnia magna mg/L EC50

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_4NO_3	-3.1

12.4. Mobility in soil

Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No data available.

12.6. Other adverse effects

Mobility: 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
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

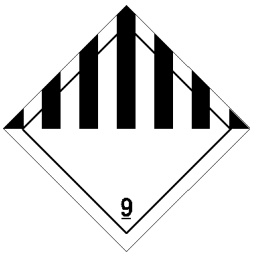
14.5
Environmental Hazard Not regulated

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_4NO_3 6484-52-2 (40 - 65%)	2500 tonne (technical grade; (a) this applies 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)	350 tonne

Denmark
Danish Sikkerhedsgruppe B

France
ICPE Classified installation: article 4702

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

Component	German WGK Section
Ammonium Nitrate; NH_4NO_3 6484-52-2 (40 - 65%)	class 1
Potassium sulphate; K_2SO_4 7778-80-5 (5 - 10%)	class 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_4NO_3 6484-52-2 (40 - 65%)	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)

15.2 Chemical safety assessment
Substance(s) usage is covered according to Reach regulation 1907/2006

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the 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_4NO_3	Use restricted. See item 58.	

Chemical Name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Ammonium Nitrate; NH_4NO_3	350	2500

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
- H272 - May intensify fire; oxidizer
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation

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).

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Restrictions on use
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Reason for revision
*** Indicates changes since the last revision. This version replaces all previous versions