# Safety Data Sheet

**Issue Date** 02-Apr-2014 **Revision Date** 10-Oct-2019 **Version:** 10

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

**1.1. Product identifier**

| | |
|---|---|
| **Product Name** | **Osmocote Pro 18-9-10+2MgO+TE; 8-9M** |
| **Product Code:** | **87550225EB** |
| **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) |

**2.2. Label elements**

**Hazard Statements:**

H412 - Harmful to aquatic life with long lasting effects

**EU Specific Hazard Statements:**

EUH204 - Contains isocyanates. May produce an allergic reaction

**Other hazards (UN-GHS)**

Harmful 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; $NH_4NO_3$ | 229-347-8 | 6484-52-2 | 25 - 40% | Eye Irrit. 2 (H319)<br>Ox. Sol. 3 (H272) | 01-2119490981-27 |
| Copper sulphate anhydrous; $CuSO_4$ | 231-847-6 | 7758-98-7 | 0.1 - 1% | Eye Dam. 1 (H318)<br>Acute Tox. 4 (H302)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | 01-2119520566-40 |
| Manganese sulphate; $MnSO_4+1H_2O$ | 232-08-99 | 7785-87-7 | 0.1 - 1% | STOT RE 2 (H373)<br>Eye Dam. 1 (H318)<br>Aquatic Chronic 2 (H411) | 01-2119456624-35 |

*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**

Do not flush into surface water or sanitary sewer system. Keep away from living quarters.

**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:* Avoid dust formation. Shovel or sweep up. 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: 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. Keep at temperatures between 0 °C and 40 °C.

Packaging Materials: Store in original container. Store in a closed container.

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

| | |
|---|---|
| *Ammonium nitrate; $NH_4NO_3$* | |
| **Australia** | N.A. |
| **Czech Republic OEL** | 10.0 mg/m³ TWA |
| *Copper sulphate anhydrous; $CuSO_4$* | |
| **Austria** | STEL 4 mg/m³<br>TWA: 1 mg/m³ |
| **Australia** | N.A. |
| **Finland** | TWA: 0.02 mg/m³ |
| **Poland** | TWA: 0.2 mg/m³ |
| **Russia TWA** | 0.5 mg/m³ TWA 1258 |
| **Switzerland** | STEL: 0.2 mg/m³<br>TWA: 0.1 mg/m³ |
| *Manganese sulphate; $MnSO_4+1H_2O$* | |
| **Austria** | STEL 2 mg/m³<br>TWA: 0.5 mg/m³ |
| **Australia** | 0.2 mg/m³ |
| **Belgium - 8 Hr TWA** | 0.2 mg/m³ |
| **Denmark** | TWA: 0.2 mg/m³ |
| **Finland** | TWA: 0.02 mg/m³ TWA: 0.2 mg/m³ |
| **Ireland** | TWA: 0.2 mg/m³<br>STEL: 0.6 mg/m³ |
| **Japan** | 0.2 mg/m³ OEL Mn |
| **NL MAC - TWA:** | STEL: 0.05 mg/m³<br>TWA: 0.2 mg/m³ |
| **Norway** | TWA: 0.1 mg/m³<br>STEL: 0.1 ppm |
| **Poland** | TWA: 0.05 mg/m³ |
| **Portugal** | TWA: 0.2 mg/m³ |
| **Spain - Valores Limite Ambientales - VLE** | TWA: 0.2 mg/m³<br>TWA: 0.05 mg/m³ |
| **Switzerland** | TWA: 0.5 mg/m³ |
| **UK EH40 WEL (8h)** | 5 mg/m³ |

### Derived No Effect Level (DNEL)

| Component | Oral | Dermal | Inhalation |
|---|---|---|---|
| Ammonium nitrate; $NH_4NO_3$<br>6484-52-2 ( 25 - 40% ) | 36 mg/m³ | 5.12 mg/kg bw/day | 8.9 mg/m³ |
| Manganese sulphate; $MnSO_4+1H_2O$ | 37.6 mg/m³ | 0.004 mg/kg bw/day | 0.2 mg/m³ |

| | | | |
|---|---|---|---|
| 7785-87-7 ( 0.1 - 1% ) | | | |

**Predicted No Effect Concentration (PNEC)**
No data available

| Component | Fresh Water | Freshwater sediment | Sea Water | Sea sediment | Soil | Impact on Sewage Treatment |
|---|---|---|---|---|---|---|
| Ammonium nitrate; $NH_4NO_3$ 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; $MnSO_4+1H_2O$ 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
**Color:** brown, Greenish.
**Odor:** None
**Bulk density:** 900 - 1100 kg/m³ no data available
**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** May cause slight irritation.

**Skin Contact** May cause irritation.

**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts.

**Information on Toxicological Effects**
None known
**Acute Toxicity**
**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 ) | > 5000 mg/kg | > 88.8 mg/L ( Rat ) 4 h |
| Copper sulphate anhydrous; $CuSO_4$ | = 300 mg/kg ( Rat ) | = 1000 mg/kg ( Rabbit ) | |
| Manganese sulphate; $MnSO_4+1H_2O$ | = 2125 mg/kg ( Rat ) | | > 4.98 mg/L (Rat) 4h |

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

**Serious eye damage/eye irritation** Classification based on individual ingredients of the mixture.

**Respiratory or skin sensitization** As a precaution the product should be treated as a sensitizer.

**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** 8% 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 | - | - |
| Copper sulphate anhydrous; $CuSO_4$ | - | 0.1: 96 h Oncorhynchus mykiss mg/L LC50 | - | 0.024: 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** 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**

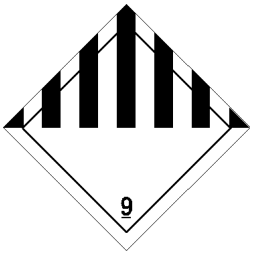
**Bulk transport according Annex II of MARPOL and IBC Code** No data available

**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; $NH_4NO_3$ 6484-52-2 ( 25 - 40% ) | 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**
Denmark 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 ( 25 - 40% ) | 1 |
| Copper sulphate anhydrous; $CuSO_4$ 7758-98-7 ( 0.1 - 1% ) | 2 |
| Manganese sulphate; $MnSO_4+1H_2O$ 7785-87-7 ( 0.1 - 1% ) | 2 |

| 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 ( 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) |

**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; $NH_4NO_3$ | 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**

- 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<br>• 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) |
| **Issue Date** | 02-Apr-2014 |
| **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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