# Safety Data Sheet

**Issue Date:** 20-Feb-2014 **Revision Date:** 26-Oct-2016 **Version:** 4.02

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

**1.1. Product identifier**

**Product Name:** **Osmocote Exact Standard 5-6M; 15-9-12+2MgO+TE**
**Product Code** **88410225EA**
**Synonyms:** **Osmocote Exact Standard 15-3.9-10+1.2Mg+TE**

**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 International BV
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*

| | |
|---|---|
| **Chronic aquatic toxicity** | Category 3 - (H412) |

**2.2. Label elements**
**Hazard Statements:**
H412 - Harmful to aquatic life with long lasting effects

**Other hazards (UN-GHS)**
H316 - Causes mild skin irritation

## 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 |
|---|---|---|---|---|---|
| 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 |
| Calcium sulphate dihydrate; $CaSO_4+2H_2O$ | 231-900-3 | 10101-41-4 | 1 - 5% | Not classified | 01-2119444918-26 |
| Iron sulphate; $FeSO_4+1H_2O$ | 231-753-5 | 7720-78-7 | 1 - 5% | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Acute Tox. 4 (H302) | 01-2119513203-57 |
| Iron EDTA; Fe-EDTA | 239-802-2 | 15708-41-5 | 0.1 - 1% | Not classified | 01-2119496228-27 |
| Talc | 238-877-9 | 14807-96-6 | 0.1 - 1% | Not classified | Exempt |

| | | | | | |
|---|---|---|---|---|---|
| Copper sulphate anh; $CuSO_4$ | 231-847-6 | 7758-98-7 | 0.1 - 1% | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<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 |
| Sodium borate; $Na_2B_4O_7$ | 215-540-4 | 1330-43-4 | 0.1 - 1% | Eye Irrit. 2 (H319)<br>Repr. 1B (H360FD) | 01-2119490790-32 |
| Calcium fluoride; $CaF_2$ | 232-188-7 | 7789-75-5 | < 0.1% | Not classified | Exempt |
| Zinc sulphate mono hydrate; $ZnSO_4+1H_2O$ | 231-793-3 | 7446-19-7 | < 0.1% | Acute Tox. 4 (H302)<br>Eye Dam. 1 (H318)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | 01-2119474684-27 |
| Sodium molybdate; $Na_2MoO_4+2H_2O$ | 231-551-7 | 7631-95-0 | < 0.1% | Not classified | 01-2119489495-21 |
| Magnesium oxide; MgO | 215-171-9 | 1309-48-4 | < 0.1% | Not classified | Exempt |

**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.

**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.

**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:** 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. 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 bags should be closed well. Keep at temperatures between 0 °C and 40 °C.
LGK (Germany) 5.1C
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; $NH_4NO_3$* | |
| **Australia TWA** | N.A. |
| **Czech Republic OEL** | 10.0 mg/m³ TWA |
| *Calcium sulphate dihydrate; $CaSO_4+2H_2O$* | |
| **Belgium - 8 Hr TWA** | 10 mg/m³ TWA |
| **Portugal** | TWA: 10 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 10 mg/m³ |
| **Switzerland** | TWA: 3 mg/m³ |
| *Iron sulphate; $FeSO_4+1H_2O$* | |
| **Belgium - 8 Hr TWA** | 1 mg/m³ |
| **Denmark** | TWA: 1 mg/m³ |
| **Finland** | TWA: 1 mg/m³ |

| | |
|---|---|
| **Ireland** | TWA: 1 mg/m³<br>STEL: 2 mg/m³ |
| **Norway** | TWA: 1 mg/m³<br>STEL: 1 mg/m³ |
| **Portugal** | TWA: 1 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 1 mg/m³ |
| **Switzerland** | TWA: 1 mg/m³ |
| **UK oes/mel:** | TWA: 1 mg/m³ |
| *Iron EDTA; Fe-EDTA* | |
| **Denmark** | TWA: 1 mg/m³ |
| **Finland** | TWA: 1 mg/m³ |
| **Portugal** | TWA: 1 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 1 mg/m³ |
| **Switzerland** | TWA: 1 mg/m³ |
| *Talc* | |
| **Austria** | TWA: 2 mg/m³ |
| **Australia TWA** | 2.5 mg/m³ TWA |
| **Belgium - 8 Hr TWA** | 2 mg/m³ TWA |
| **Bulgaria - Occupational Exposure Limits - TWAs** | 1.0 fiber/cm3 TWA (containing <2% free Crystalline silicon dioxide in respirable fraction, respirable fraction, fibers); 6.0 mg/m³ TWA (containing <2% free Crystalline silicon dioxide in respirable fraction, inhalable fraction); 3.0 mg/m³ TWA (containing <2% free Crystalline silicon dioxide in respirable fraction, respirable fraction) |
| **Czech Republic OEL** | 2.0 mg/m³ TWA (as respirable fraction, <=5% Silica, Cristobalite, Tridymite and .gamma.-Aluminium oxide) |
| **Denmark** | TWA: 0.3 fiber/cm3 |
| **Finland** | TWA: 0.5 fiber/cm3<br>STEL: 2 ppm<br>STEL: 1 ppm |
| **Hungary - Occupational Exposure Limits - TWAs** | 2 mg/m³ TWA |
| **Iceland - OEL - 8 Hour** | 0.3 fiber/cm3 TWA |
| **Ireland** | TWA: 10 mg/m³<br>TWA: 0.8 mg/m³<br>STEL: 30 mg/m³<br>STEL: 2.4 mg/m³ |
| **Japan - TWAs** | 0.5 mg/m³ OEL<br>2 mg/m³ OEL |
| **Korea - ISHA - Occupational Exposure Limits - TWAs** | 6 mg/m³ TWA (soapstone, Serial No. 312); 3 mg/m³ TWA (soapstone, respirable fraction, Serial No. 313); 2 mg/m³ TWA (as Talc containing no asbestos fibers, respirable fraction, Serial No. 706) |
| **Malaysia - Occupational Exposure Limits - TWAs** | 2 mg/m³ TWA (respirable fraction of particulate matter) |
| **Netherlands National MAC Data - Time Weighted Average (TWA):** | TWA: 0.25 mg/m³ |
| **Norway** | TWA: 6 mg/m³<br>TWA: 2 mg/m³<br>STEL: 6 mg/m³<br>STEL: 2 mg/m³ |
| **Poland** | TWA: 4.0 mg/m³<br>TWA: 1.0 mg/m³ |
| **Portugal** | TWA: 2 mg/m³ |
| **Romania - Occupational Exposure Limits - TWAs** | 2 mg/m³ TWA (and no Quartz >=1%, inhalable fraction, dust) |
| **Slovenia - Occupational Exposure Limits - TWAs** | 2 mg/m³ TWA (respirable fraction) |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 2 mg/m³ |
| **Singapore - OEL:PELs** | 2 mg/m³ PEL |
| **Switzerland** | TWA: 2 mg/m³ |
| **UK oes/mel:** | STEL: 3 mg/m³<br>TWA: 1 mg/m³ |
| *Copper sulphate anh; $CuSO_4$* | |
| **Austria** | STEL 4 mg/m³<br>STEL 0.4 mg/m³<br>TWA: 1 mg/m³<br>TWA: 0.1 mg/m³ |
| **Australia TWA** | N.A. |
| **Finland** | TWA: 1 mg/m³ |
| **Poland** | TWA: 0.2 mg/m³ |
| **Russia TWA** | 0.5 mg/m³ TWA 1200 |
| **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 TWA** | 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 |
| **Norway** | TWA: 1 mg/m³<br>TWA: 0.1 mg/m³<br>STEL: 1 ppm<br>STEL: 0.1 mg/m³ |
| **Poland** | TWA: 0.2 mg/m³<br>TWA: 0.05 mg/m³ |
| **Portugal** | TWA: 0.2 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 0.2 mg/m³ |
| **Switzerland** | TWA: 0.5 mg/m³ |
| **UK oes/mel:** | TWA: 0.5 mg/m³ |
| *Sodium borate; $Na_2B_4O_7$* | |
| **Australia TWA** | 1 mg/m³ TWA |
| **Belgium - 8 Hr TWA** | 2 mg/m³ TWA borate |
| **Denmark** | TWA: 1 mg/m³ |
| **France - Occupational Exposure Limits - 8 Hour VMEs** | TWA: 1 mg/m³ |
| **Iceland - OEL - 8 Hour** | 1 mg/m³ TWA |
| **Ireland** | TWA: 1 mg/m³<br>STEL: 3 mg/m³ |
| **Korea - ISHA - Occupational Exposure Limits - TWAs** | 1 mg/m³ TWA (anhydrous, Serial No. 239) |
| **Malaysia - Occupational Exposure Limits - TWAs** | 1 mg/m³ TWA |
| **Norway** | TWA: 1 mg/m³<br>STEL: 3 mg/m³ |
| **Portugal** | STEL: 6 mg/m³<br>TWA: 2 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | STEL: 6 mg/m³<br>TWA: 2 mg/m³ |
| **Singapore - OEL:PELs** | 1 mg/m³ PEL |
| **Switzerland** | TWA: 1 mg/m³ |
| **UK oes/mel:** | STEL: 3 mg/m³<br>TWA: 1 mg/m³ |
| *Calcium fluoride; $CaF_2$* | |
| **Denmark** | TWA: 2.5 mg/m³ |
| **Ireland** | TWA: 2.5 mg/m³<br>STEL: 7.5 mg/m³ |
| **Latvia - Occupational Exposure Limits - TWAs** | 0.5 mg/m³ TWA (as F, listed under Hydrofluoric acid salts) |
| **Poland** | TWA: 2 mg/m³ |
| **Portugal** | TWA: 2.5 mg/m³ |
| **Romania - Occupational Exposure Limits - TWAs** | 1 mg/m³ TWA |
| **Russia TWA** | 0.5 mg/m³ TWA 1050 |
| *Sodium molybdate; $Na_2MoO_4+2H_2O$* | |
| **Austria** | STEL 10 mg/m³<br>TWA: 5 mg/m³ |
| **Czech Republic OEL** | 5 mg/m³ TWA |
| **Denmark** | TWA: 5 mg/m³ |
| **Finland** | TWA: 0.5 mg/m³ |
| **France - Occupational Exposure Limits - 8 Hour VMEs** | TWA: 5 mg/m³<br>STEL: 10 mg/m³ |
| **Ireland** | TWA: 10 mg/m³ TWA: 0.5 mg/m³<br>STEL: 30 mg/m³ STEL: 1.5 mg/m³ |
| **Norway** | TWA: 5 mg/m³<br>STEL: 5 mg/m³ |
| **Poland** | STEL: 10 mg/m³<br>TWA: 4 mg/m³ |
| **Portugal** | TWA: 0.5 mg/m³ |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 0.5 mg/m³ |
| **Switzerland** | TWA: 5 mg/m³ |
| **UK oes/mel:** | TWA: 5 mg/m³ |
| *Magnesium oxide; MgO* | |
| **Austria** | STEL 20 mg/m³<br>STEL 10 mg/m³ |

| | |
|---|---|
| | TWA: 5 mg/m³<br>TWA: 10 mg/m³ |
| **Australia TWA** | 10 mg/m³ TWA fume |
| **Belgium - 8 Hr TWA** | 10 mg/m³ |
| **Bulgaria - Occupational Exposure Limits - TWAs** | 10.0 mg/m³ TWA |
| **Czech Republic OEL** | 5 mg/m³ TWA |
| **Denmark** | TWA: 6 mg/m³ |
| **France - Occupational Exposure Limits - 8 Hour VMEs** | TWA: 10 mg/m³ |
| **Hungary - Occupational Exposure Limits - TWAs** | 6 mg/m³ TWA |
| **Iceland - OEL - 8 Hour** | 6 mg/m³ TWA Mg |
| **Ireland** | TWA: 4 mg/m³<br>TWA: 5 mg/m³<br>TWA: 10 mg/m³<br>STEL: 10 mg/m³<br>STEL: 12 mg/m³<br>STEL: 30 mg/m³ |
| **Korea - ISHA - Occupational Exposure Limits - TWAs** | 10 mg/m³ TWA (Serial No. 272) |
| **Malaysia - Occupational Exposure Limits - TWAs** | 10 mg/m³ TWA (fume) |
| **Norway** | TWA: 10 mg/m³<br>STEL: 20 mg/m³ |
| **Poland** | TWA: 10 mg/m³ |
| **Portugal** | TWA: 10 mg/m³ |
| **Romania - Occupational Exposure Limits - TWAs** | 5 mg/m³ TWA (fume) |
| **Spain OEL - Time Weighted Average (TWA):** | TWA: 10 mg/m³ |
| **Singapore - OEL:PELs** | 10 mg/m³ PEL |
| **Switzerland** | TWA: 3 mg/m³ |
| **UK oes/mel:** | STEL: 30 mg/m³<br>STEL: 12 mg/m³<br>TWA: 10 mg/m³<br>TWA: 4 mg/m³ |

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

**Personal protective equipment**

**Eye/face Protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. 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:** Solid
**Appearance:** Granules
**Color:** brown, Greenish.
**Odor:** Not significant
**Bulk density:** 900 - 1100 kg/m³
**pH:** 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):** | Non-flammable |
| **Vapor Pressure:** | Solid, Not Applicable |
| **Vapor Density:** | Solid, Not Applicable |
| **Specific Gravity:** | no data available |
| **Water Solubility:** | Soluble in water |
| **Solubility(ies)** | no data available |
| **Partition Coefficient:** | Solid, Not Applicable |
| **Autoignition Temperature:** | Not Applicable |
| **Decomposition 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 normal conditions.
**10.3. 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.

**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**
None known based on information supplied.

**10.6. Hazardous decomposition products**
None under normal processing.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**

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

**Product Information**

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| | |
|---|---|
| **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. |

**Information on Toxicological Effects:**

**Symptoms** No information available.

**Acute Toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document:**
**ATEmix (oral):** 49,505.00 mg/kg

**Unknown Acute Toxicity:** 7% of the mixture consists of ingredient(s) of unknown toxicity.

| Ingredients | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Ammonium Nitrate; $NH_4NO_3$ | = 2217 mg/kg ( Rat ) | | > 88.8 mg/L ( Rat ) 4 h |
| Iron sulphate; $FeSO_4+1H_2O$ | = 500 mg/kg ( Rat ) | | |
| Iron EDTA; Fe-EDTA | = 5 g/kg ( Rat ) > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rat ) | > 2.05 g/m³ ( Rat ) 4 h |
| Copper sulphate anh; $CuSO_4$ | = 300 mg/kg ( Rat ) | = 1000 mg/kg ( Rabbit ) | |
| Manganese sulphate; $MnSO_4+1H_2O$ | = 782 mg/kg ( Rat ) | | |
| Sodium borate; $Na_2B_4O_7$ | = 2660 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | |
| Calcium fluoride; $CaF_2$ | = 4250 mg/kg ( Rat ) | | |
| Sodium molybdate; $Na_2MoO_4+2H_2O$ | = 4233 mg/kg ( Rat ) | > 2000 mg/kg (Rat) | > 2080 mg/m³ ( Rat ) 4 h |

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

**skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ Cell Mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive Toxicity** No information available.

**STOT - Single Exposure** No information available.

**STOT - Repeated Exposure** No information available.

**Aspiration Hazard** No information available.

## Section 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

**Ecotoxicity** Do not allow product to enter the environment uncontrolled.

**Unknown Aquatic Toxicity:** 7% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

| Ingredients | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|---|---|---|---|---|
| Ammonium Nitrate; $NH_4NO_3$ | - | 65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static | - | - |
| Iron sulphate; $FeSO_4+1H_2O$ | - | 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 |
| Talc | - | 100: 96 h Brachydanio rerio g/L LC50 semi-static | - | - |
| Copper sulphate anh; $CuSO_4$ | - | 0.1: 96 h Oncorhynchus mykiss mg/L LC50 | - | 0.024: 48 h Daphnia magna mg/L EC50 |
| Sodium borate; $Na_2B_4O_7$ | 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 information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation:** No information available.

| Ingredients | LOGPOW |
|---|---|
| Ammonium Nitrate; $NH_4NO_3$ | -3.1 |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** No information available.

**12.6. Other adverse effects**

**Mobility:** No information 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 re-use empty containers. Dispose of as unused product.

**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**

| **Component** | **IMDG - Marine Pollutants** |
|---|---|
| Copper sulphate anh; $CuSO_4$ 7758-98-7 ( 0.1 - 1% ) | IMDG regulated marine pollutant (Listed in the index, listed under Copper sulphate, anhydrous, hydrates and solution) |

**Marine Pollutant:** No information available

**14.6**

**EmS:** F-H / S-Q

**Special Provisions** 186, 193

**14.7**

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not regulated

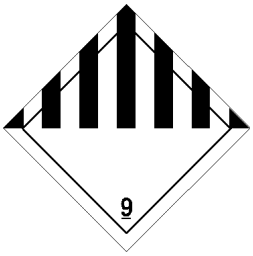
**ADR/RID**

**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 (Note 3, applies to Ammonium nitrate in which the Nitrogen content due to Ammonium nitrate is >28% by weight containing <=0.2 % combustible material, >24.5% and <28% by weight containing <=0.4% combustible material and to aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate is >80% by weight) | 350 tonne (Note 3, applies to Ammonium nitrate in which the Nitrogen content due to Ammonium nitrate is >28% by weight containing <=0.2 % combustible material, >24.5% and <28% by weight containing <=0.4% combustible material and to aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate is >80% by weight) |

**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; $NH_4NO_3$<br>6484-52-2 ( 25 - 40% ) | class 1 |
| Iron sulphate; $FeSO_4+1H_2O$<br>7720-78-7 ( 1 - 5% ) | class 1 |
| Iron EDTA; Fe-EDTA<br>15708-41-5 ( 0.1 - 1% ) | class 2 |
| Copper sulphate anh; $CuSO_4$<br>7758-98-7 ( 0.1 - 1% ) | class 2 |
| Manganese sulphate; $MnSO_4+1H_2O$<br>7785-87-7 ( 0.1 - 1% ) | class 1 |
| Sodium borate; $Na_2B_4O_7$<br>1330-43-4 ( 0.1 - 1% ) | class 1 |
| Calcium fluoride; $CaF_2$<br>7789-75-5 ( < 0.1% ) | class 1 |
| Zinc sulphate mono hydrate; $ZnSO_4+1H_2O$<br>7446-19-7 ( < 0.1% ) | class 3 |
| Sodium molybdate; $Na_2MoO_4+2H_2O$<br>7631-95-0 ( < 0.1% ) | class 1 |
| Magnesium oxide; MgO<br>1309-48-4 ( < 0.1% ) | class 1 |

**European Union**

**REACH:**

| Component | EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances |
|---|---|
| Ammonium Nitrate; $NH_4NO_3$<br>6484-52-2 ( 25 - 40% ) | Use restricted. See item 58. (Conditions of restrictions 27 June 2010) |
| Sodium borate; $Na_2B_4O_7$<br>1330-43-4 ( 0.1 - 1% ) | Use restricted. See item 30. |

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

**Authorizations and/or restrictions on use:**
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**
Not Applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**
Not Applicable.

**15.2 Chemical safety assessment**
**Chemical Safety Report** 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
H373 - May cause damage to organs through prolonged or repeated exposure in contact with skin

H411 - Toxic to aquatic life with long lasting effects
H316 - Causes mild skin 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 statement: CLP (EU) specific hazard statement

| | |
|---|---|
| **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<br>Regulation (EC) No 1272/2008 |
| **Prepared by:** | Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM) |
| **Issue Date:** | 20-Feb-2014 |
| **Revision Date:** | 26-Oct-2016 |
| 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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