

# Safety Data Sheet

Issue Date 24-Mar-2014

Revision Date 26-Sep-2019

Version: 3

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

### 1.1. Product identifier

**Product Name:** Osmocote Topdress 22-5-6+2MgO+TE  
**Product Code:** 41610225EA  
**Synonyms:** Osmocote Topdress 22-2.2-5+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)*

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

**Signal Word:** None

### EU Specific Hazard Statements:

EUH210 - Safety data sheet available on request

### Other hazards (UN-GHS)

H316 - Causes mild skin irritation

## 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 <sub>4</sub> NO <sub>3</sub>	229-347-8	6484-52-2	25 - 40%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Urea	200-315-5	57-13-6	25 - 40%	Not classified	01-2119463277-33
Sulphur; S	231-722-6	7704-34-9	1 - 5%	Skin Irrit. 2 (H315)	01-2119487295-27
Diiron trioxide; Fe <sub>2</sub> O <sub>3</sub>	215-721-8	1345-25-1	1 - 5%	Not classified	01-2119638146-39
Magnesium oxide; MgO	215-171-9	1309-48-4	1 - 5%	Not classified	Exempt
Calcium sulphate dihydrate; CaSO <sub>4</sub> +2H <sub>2</sub> O	231-900-3	10101-41-4	0.1 - 1%	Not classified	01-2119444918-26
Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> O	232-08-99	7785-87-7	0.1 - 1%	STOT RE 2 (H373)	01-2119456624-35

				Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	
Calcium carbonate; CaCO <sub>3</sub>	207-439-9	471-34-1	0.1 - 1%	Not classified	Exempt
Manganese oxide; MnO	215-202-6	1344-43-0	0.1 - 1%	Not classified	01-2119446291-44
Zinc sulphate mono hydrate; ZnSO <sub>4</sub> +1H <sub>2</sub> O	231-793-3	7446-19-7	0.1 - 1%	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119474684-27
Zinc oxide; ZnO	1314-13-2	1314-13-2	0.1 - 1%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119463881-32
Copper (I) oxide; Cu <sub>2</sub> O	215-270-7	1317-39-1	< 0.1%	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119513794-36

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** In case of shortness of breath, give oxygen. Possible symptoms are coughing and/or dyspnoea. Move 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 thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

**Ingestion:** 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. In case of respiratory difficulties practice oxygenotherapy. Possible symptoms are nausea and/or vomiting.

### 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:** Coordinate fire extinguishing measures to fire in surrounding area. Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.

**Unsuitable Extinguishing Media:** High volume water jet.

### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

Use extinguishing agent suitable for type of surrounding fire. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:** Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment.  
**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. Do not create a powder cloud by using a brush or compressed air.

**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.  
 LGK (Germany) Exempt

**7.3. Specific end use(s)**

Specific use(s): Fertilizer; [www.everris.com](http://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; NH<sub>4</sub>NO<sub>3</sub></i>	
Australia	N.A.
Czech Republic OEL	10.0 mg/m <sup>3</sup> TWA
<i>Urea</i>	
Bulgaria - OEL - TWAs	10.0 mg/m <sup>3</sup> TWA
Latvia - OEL - TWAs	10 mg/m <sup>3</sup> TWA
<i>Sulphur; S</i>	
Latvia - OEL - TWAs	6 mg/m <sup>3</sup> TWA
Russia TWA	6 mg/m <sup>3</sup> TWA 1863
<i>Diliron trioxide; Fe<sub>2</sub>O<sub>3</sub></i>	
Austria	STEL 20 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
greece OEL 15 minute	10 mg/m <sup>3</sup> STEL Fe
Hungary - OEL - TWAs	6 mg/m <sup>3</sup> TWA
Japan - TWAs	1 mg/m <sup>3</sup> OEL 4 mg/m <sup>3</sup> OEL
Poland	STEL: 10 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>
Switzerland	TWA: 3 mg/m <sup>3</sup>
UK EH40 WEL (8h)	1 mg/m <sup>3</sup> TWA
<i>Magnesium oxide; MgO</i>	
Austria	STEL 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Australia	10 mg/m <sup>3</sup> TWA fume

Belgium - 8 Hr TWA	10 mg/m <sup>3</sup>
Bulgaria - OEL- TWAs	10.0 mg/m <sup>3</sup> TWA
Czech Republic OEL	5 mg/m <sup>3</sup> TWA
Denmark	TWA: 6 mg/m <sup>3</sup>
France - OEL - 8 Hour VMEs	TWA: 10 mg/m <sup>3</sup>
Hungary - OEL - TWAs	6 mg/m <sup>3</sup> TWA
Iceland - OEL - 8 Hour	6 mg/m <sup>3</sup> TWA Mg
Ireland	TWA: 4 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Korea - ISHA - OEL - TWAs	10 mg/m <sup>3</sup> TWA (Serial No. 277)
Malaysia - OEL - TWAs	10 mg/m <sup>3</sup> TWA (fume)
Norway	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
Poland	TWA: 10 mg/m <sup>3</sup>
Portugal	TWA: 10 mg/m <sup>3</sup>
Romania - OEL - TWAs	5 mg/m <sup>3</sup> TWA (fume)
Spain OEL - TWA:	TWA: 10 mg/m <sup>3</sup>
Singapore - OEL:PELs	10 mg/m <sup>3</sup> PEL
Switzerland	TWA: 3 mg/m <sup>3</sup>
UK EH40 WEL (8h)	10 mg/m <sup>3</sup>
<i>Calcium sulphate dihydrate; CaSO<sub>4</sub>+2H<sub>2</sub>O</i>	
Belgium - 8 Hr TWA	10 mg/m <sup>3</sup> TWA
Portugal	TWA: 10 mg/m <sup>3</sup>
Spain OEL - TWA:	TWA: 10 mg/m <sup>3</sup>
Switzerland	TWA: 3 mg/m <sup>3</sup>
UK EH40 WEL (8h)	10 mg/m <sup>3</sup> TWA (Inhalable) 4 mg/m <sup>3</sup> TWA (Respirable)
<i>Manganese sulphate; MnSO<sub>4</sub>+1H<sub>2</sub>O</i>	
Austria	STEL 2 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>
Australia	0.2 mg/m <sup>3</sup>
Belgium - 8 Hr TWA	0.2 mg/m <sup>3</sup>
Denmark	TWA: 0.2 mg/m <sup>3</sup>
Finland	TWA: 0.02 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
Ireland	TWA: 0.2 mg/m <sup>3</sup> STEL: 0.6 mg/m <sup>3</sup>
Japan - TWAs	0.2 mg/m <sup>3</sup> OEL Mn
Netherlands National MAC Data - TWA:	STEL: 0.05 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
Norway	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.1 ppm
Poland	TWA: 0.05 mg/m <sup>3</sup>
Portugal	TWA: 0.2 mg/m <sup>3</sup>
Spain OEL - TWA:	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>
Switzerland	TWA: 0.5 mg/m <sup>3</sup>
UK EH40 WEL (8h)	5 mg/m <sup>3</sup>
<i>Calcium carbonate; CaCO<sub>3</sub></i>	
Australia	10 mg/m <sup>3</sup> TWA inhalable dust
Czech Republic OEL	10.0 mg/m <sup>3</sup> TWA
France - OEL - 8 Hour VMEs	TWA: 10 mg/m <sup>3</sup>
Korea - ISHA - OEL - TWAs	10 mg/m <sup>3</sup> TWA (Serial No. 572)
Latvia - OEL - TWAs	6 mg/m <sup>3</sup> TWA
Poland	TWA: 10 mg/m <sup>3</sup>
Portugal	TWA: 10 mg/m <sup>3</sup>
Switzerland	TWA: 3 mg/m <sup>3</sup>
UK EH40 WEL (8h)	10 mg/m <sup>3</sup> TWA (inhalable) 4 mg/m <sup>3</sup> TWA (respirable)
<i>Manganese oxide; MnO</i>	
Austria	STEL 2 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>
Bulgaria - OEL- TWAs	0.3 mg/m <sup>3</sup> TWA (as Mn)
Denmark	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>
Finland	TWA: 0.02 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
Ireland	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>

	STEL: 0.6 mg/m <sup>3</sup> STEL: 0.15 mg/m <sup>3</sup> 0.2 mg/m <sup>3</sup> OEL Mn
Japan - TWAs	
Netherlands National MAC Data - TWA:	STEL: 0.05 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
Norway	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.1 ppm
Poland	TWA: 0.05 mg/m <sup>3</sup>
Portugal	TWA: 0.2 mg/m <sup>3</sup>
Spain OEL - TWA:	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>
Switzerland	TWA: 0.5 mg/m <sup>3</sup>
<i>Zinc oxide; ZnO</i>	
Austria	TWA: 5 mg/m <sup>3</sup>
Australia	5 mg/m <sup>3</sup> TWA
Belgium - 8 Hr TWA	10 mg/m <sup>3</sup> TWA
Bulgaria - OEL - TWAs	5.0 mg/m <sup>3</sup> TWA (as Zn)
Croatia - OEL - STELs (KGVIs)	10 mg/m <sup>3</sup> STEL [KGVl]
Czech Republic OEL	2 mg/m <sup>3</sup> TWA (as Zn)
Denmark	TWA: 4 mg/m <sup>3</sup>
Finland	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
France - OEL - 8 Hour VMEs	TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
greece OEL 15 minute	10 mg/m <sup>3</sup> STEL
Hungary - OEL - TWAs	5 mg/m <sup>3</sup> TWA
Iceland - OEL - 8 Hour	4 mg/m <sup>3</sup> TWA Zn
Ireland	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Japan - TWAs	1 mg/m <sup>3</sup> OEL
Korea - ISHA - OEL - TWAs	2 mg/m <sup>3</sup> TWA (dust, respirable fraction, Serial No. 280); 5 mg/m <sup>3</sup> TWA (fume, Serial No. 281)
Latvia - OEL - TWAs	0.5 mg/m <sup>3</sup> TWA
Malaysia - OEL - TWAs	5 mg/m <sup>3</sup> TWA (fume); 10 mg/m <sup>3</sup> TWA (dust)
Norway	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Poland	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Portugal	STEL: 10 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
Romania - OEL - TWAs	5 mg/m <sup>3</sup> TWA (fume)
Russia TWA	0.5 mg/m <sup>3</sup> TWA 2360
Slovenia - OEL - TWAs	5 mg/m <sup>3</sup> TWA (respirable fraction, fume)
Spain OEL - TWA:	STEL: 10 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
Singapore - OEL:PELs	5 mg/m <sup>3</sup> PEL 10 mg/m <sup>3</sup> PEL
Switzerland	STEL: 3 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>
UK EH40 WEL (8h)	5 mg/m <sup>3</sup> TWA
<i>Copper (I) oxide; Cu<sub>2</sub>O</i>	
Austria	STEL 4 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>
Finland	TWA: 0.02 mg/m <sup>3</sup>
Poland	TWA: 0.2 mg/m <sup>3</sup>
Switzerland	STEL: 0.2 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)**

Component	Oral	Dermal	Inhalation
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	36 mg/m <sup>3</sup>	5.12 mg/kg bw/day	8.9 mg/m <sup>3</sup>
Urea 57-13-6 ( 25 - 40% )		580 mg/kg bw/day	292 mg/m <sup>3</sup>

Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> O 7785-87-7 ( 0.1 - 1% )	37.6 mg/m <sup>3</sup>	0.004 mg/kg bw/day	0.2 mg/m <sup>3</sup>
Zinc sulphate mono hydrate; ZnSO <sub>4</sub> +1H <sub>2</sub> O 7446-19-7 ( 0.1 - 1% )		8.3 mg/kg bw/day	1 mg/m <sup>3</sup>

### Predicted No Effect Concentration (PNEC)

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage Treatment
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )						18 mg/l
Urea 57-13-6 ( 25 - 40% )	0.47 mg/l		0.047 mg/l			
Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> 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
Zinc sulphate mono hydrate; ZnSO <sub>4</sub> +1H <sub>2</sub> O 7446-19-7 ( 0.1 - 1% )	20.6 µg/l		6.1 µg/l	56.5 mg/kg	35.6 mg/kg	100 µg/l

### 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

#### **Bulk density:**

800 - 1100 kg/m<sup>3</sup>

#### **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 derivatives 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):**

<b>Inhalation</b>	Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	May cause slight irritation.
<b>Skin Contact</b>	May cause irritation.
<b>Ingestion</b>	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 <sub>4</sub> NO <sub>3</sub>	= 2217 mg/kg ( Rat )	> 5000 mg/kg	> 88.8 mg/L ( Rat ) 4 h
Urea	= 8471 mg/kg ( Rat )		
Sulphur; S	> 3000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 9.23 mg/L ( Rat ) 4 h
Diron trioxide; Fe <sub>2</sub> O <sub>3</sub>	> 15 g/kg ( Rat )		
Magnesium oxide; MgO	= 3870 mg/kg ( Rat ) = 3990 mg/kg ( Rat )		
Manganese sulphate; MnSO <sub>4</sub> ·1H <sub>2</sub> O	= 2125 mg/kg ( Rat )		> 4.98 mg/L (Rat) 4h
Calcium carbonate; CaCO <sub>3</sub>	= 6450 mg/kg ( Rat )		
Zinc oxide; ZnO	> 5000 mg/kg ( Rat )		
Copper (I) oxide; Cu <sub>2</sub> O	= 470 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	= 2.92 mg/L ( Rat ) 4 h = 3.69 mg/L ( Rat ) 4 h

**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.

<b>Respiratory or skin sensitization</b>	Classification based on individual ingredients of the mixture.
<b>Germ Cell Mutagenicity</b>	Classification based on individual ingredients of the mixture.
<b>Carcinogenicity</b>	Classification based on individual ingredients of the mixture.
<b>Reproductive Toxicity</b>	Classification based on individual ingredients of the mixture.
<b>STOT - Single Exposure</b>	Classification based on individual ingredients of the mixture.
<b>STOT - Repeated Exposure</b>	Classification based on individual ingredients of the mixture.
<b>Aspiration Hazard</b>	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

0% 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 <sub>4</sub> NO <sub>3</sub>	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Urea	> 10000: 192 h Scenedesmus quadricauda mg/L EC50	16200 - 18300: 96 h Poecilia reticulata mg/L LC50	-	3910: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna Straus mg/L EC50
Sulphur; S	-	866: 96 h Brachydanio rerio mg/L LC50 static 14: 96 h Lepomis macrochirus mg/L LC50 static 180: 96 h Oncorhynchus mykiss mg/L LC50 static	-	-
Copper (I) oxide; Cu <sub>2</sub> O	0.055 - 0.076: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.021 - 0.037: 96 h Pseudokirchneriella subcapitata mg/L EC50 65: 96 h Desmodesmus subspicatus mg/L EC50	-	-	0.51: 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 <sub>4</sub> NO <sub>3</sub>	-3.1
Urea	-1.59

### 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

<b>Disposal of Wastes:</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging:</b>	Do not reuse container.
<b>Other Information:</b>	Use up product completely. Packaging material is industrial waste.

### Section 14: TRANSPORT INFORMATION

#### IMO / IMDG

<b>14.1</b>	
<b>UN-No:</b>	Not regulated
<b>14.2</b>	
<b>Proper shipping name:</b>	Not regulated
<b>14.3</b>	
<b>Hazard Class:</b>	Not regulated
<b>14.4</b>	
<b>Packing group:</b>	Not regulated
<b>14.5</b>	
<b>Marine Pollutant:</b>	Not regulated
<b>14.6</b>	
<b>Special Provisions</b>	None
<b>14.7</b>	
<b>Bulk transport according Annex II of MARPOL and IBC Code</b>	No data available

#### ADR/RID

<b>14.1</b>	
<b>UN-No:</b>	Not regulated
<b>14.2</b>	
<b>Proper shipping name:</b>	Not regulated
<b>14.3</b>	
<b>Hazard Class:</b>	Not regulated
<b>14.4</b>	
<b>Packing group:</b>	Not regulated
<b>14.5</b>	
<b>Environmental Hazard</b>	Not regulated
<b>14.6</b>	
<b>Special Provisions</b>	None

#### IATA

<b>14.1</b>	
<b>UN-No:</b>	Not regulated
<b>14.2</b>	
<b>Proper shipping name:</b>	Not regulated
<b>14.3</b>	
<b>Hazard Class:</b>	Not regulated
<b>14.4</b>	
<b>Packing group:</b>	Not regulated
<b>14.5</b>	
<b>Environmental Hazard</b>	Not regulated
<b>14.6</b>	
<b>Special Provisions</b>	None

### 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 <sub>4</sub> NO <sub>3</sub> 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**

Danish Sikkerhedsgruppe

No data available

**France**

ICPE

Classified installation: article 1331 (Type III)

**Germany**

LGK (Germany)

Water Endangering Class (WGK):

Gefahrstoffverordnung (Germany) TRGS 511

Exempt

1 (Everris classification )

C III

Component	German WGK Section
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	class 1
Urea 57-13-6 ( 25 - 40% )	class 1
Sulphur; S 7704-34-9 ( 1 - 5% )	class 1
Diiron trioxide; Fe <sub>2</sub> O <sub>3</sub> 1345-25-1 ( 1 - 5% )	NWG
Magnesium oxide; MgO 1309-48-4 ( 1 - 5% )	class 1
Calcium sulphate dihydrate; CaSO <sub>4</sub> +2H <sub>2</sub> O 10101-41-4 ( 0.1 - 1% )	class 1
Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> O 7785-87-7 ( 0.1 - 1% )	class 2 class 1
Calcium carbonate; CaCO <sub>3</sub> 471-34-1 ( 0.1 - 1% )	NWG
Manganese oxide; MnO 1344-43-0 ( 0.1 - 1% )	class 3
Zinc sulphate mono hydrate; ZnSO <sub>4</sub> +1H <sub>2</sub> O 7446-19-7 ( 0.1 - 1% )	class 3
Zinc oxide; ZnO 1314-13-2 ( 0.1 - 1% )	class 2
Copper (I) oxide; Cu <sub>2</sub> O 1317-39-1 ( < 0.1% )	class 3

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 <sub>4</sub> NO <sub>3</sub> 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 <sub>4</sub> NO <sub>3</sub>	Use restricted. See item 58.	

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

## Section 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H302 - Harmful if swallowed
- H319 - Causes serious eye irritation
- H272 - May intensify fire; oxidizer
- H318 - Causes serious eye damage
- H315 - Causes skin irritation
- H373 - May cause damage to the kidneys/ liver/ eyes/ brain/ respiratory system/ central nervous system 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 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)

### Issue Date

24-Mar-2014

### Restrictions on use

Restricted to professional users

### Reason for revision

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

This information contained herein is, to the best of Everris' knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Everris shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Everris shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.