

Safety Data Sheet

Issue Date: 23-Jun-2016

Revision Date: 13-Jul-2016

Version: 1

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

1.1. Product identifier

Product Code 76620225AU
Product Name: Osmocote Pro Low P 12-14M

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

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

Recommended Use: Fertilizer
Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

Manufacturer

Everris Australia Pty Ltd, 211/33 Lexington Drive, Bella Vista, NSW 2153, Australia. Tel: +61(2) 8801 3300

For further information, please contact

INFO-MSDS@EVERRIS.COM

1.4. Emergency telephone number

Australia: (02) 8014 4558
 New Zealand: (09) 9929 1483

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008

Serious Eye Damage or Eye Irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Product Identifier:



Signal Word:

Danger

Hazard Statements:

H318 - Causes serious eye damage
 H412 - Harmful to aquatic life with long lasting effects
 Contains Potassium sulphate; K₂SO₄
 EUH204 - Contains isocyanates. May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

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/physician
 P501 - Dispose of container in accordance with local regulation

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 to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ammonium Nitrate; NH ₄ NO ₃	229-347-8	6484-52-2	30 - 60%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Potassium sulphate; K ₂ SO ₄	231-915-5	7778-80-5	10 - 30%	Eye Dam. 1 (H318)	01-2119489441-34
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 anh; CuSO ₄	231-847-6	7758-98-7	0.1 - 1%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119520566-40
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
Zinc oxide; ZnO	1314-13-2	1314-13-2	< 0.1%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119463881-32
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O	231-793-3	7446-19-7	< 0.1%	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119474684-27
Copper (I) Oxide; Cu ₂ O	215-270-7	1317-39-1	< 0.1%	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119513794-36
Biuret; C ₆ H ₈ O ₇	203-559-0	108-19-0	< 0.1%	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	no data available
Sodium borate; Na ₂ B ₄ O ₇	215-540-4	1330-43-4	< 0.1%	Eye Irrit. 2 (H319) Repr. 1B (H360FD)	01-2119490790-32

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:	Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Eye Contact:	Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If eye irritation persists, consult a specialist.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do not induce vomiting without medical advice.

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: Ensure adequate ventilation. Wear personal protective equipment. Evacuate personnel to safe areas.

For Emergency Responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not allow product to enter the environment uncontrolled.

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: Take up mechanically and collect in suitable container for disposal. If material is uncontaminated, collect and reuse as recommended for product.

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 container tightly closed in a dry and well-ventilated place.
For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well.
Bags or Bulk.

Packaging Materials:

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**

<i>Ammonium Nitrate; NH₄NO₃</i>	
Australia TWA	N.A.
Czech Republic OEL	10.0 mg/m ³ TWA
<i>Potassium sulphate; K₂SO₄</i>	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m ³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m ³ TWA
<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
Netherlands - OEL - MACs:	1 mg/m ³
Norway	TWA: 1 mg/m ³ STEL: 1 mg/m ³
Portugal	TWA: 1 mg/m ³
Spain OEL - Time Weighted Average (TWA):	TWA: 1 mg/m ³
Switzerland	TWA: 1 mg/m ³
UK oes/mel:	TWA: 1 mg/m ³
<i>Copper sulphate anh; CuSO₄</i>	
Austria	STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³
Australia TWA	N.A.
Finland	TWA: 1 mg/m ³
German mak	TWA: 0.01 mg/m ³ Ceiling / Peak: 0.02 mg/m ³
Netherlands - OEL - MACs:	0.1 mg/kg TWA
Poland	TWA: 0.2 mg/m ³
Russia TWA	0.5 mg/m ³ TWA 1200
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 TWA	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
German mak	TWA: 0.2 mg/m ³ TWA: 0.02 mg/m ³ Ceiling / Peak: 1.6 mg/m ³ Ceiling / Peak: 0.16 mg/m ³
Ireland	TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³
Netherlands - OEL - MACs:	1 mg/m ³
Norway	TWA: 1 mg/m ³ TWA: 0.1 mg/m ³ STEL: 1 ppm STEL: 0.1 mg/m ³
Poland	TWA: 0.2 mg/m ³

	TWA: 0.05 mg/m ³
Portugal	TWA: 0.2 mg/m ³
Spain OEL - Time Weighted Average (TWA):	TWA: 0.2 mg/m ³
Sweden - OEL - 8 Hour	0.2 mg/m ³ LLV (totalt)
Switzerland	TWA: 0.5 mg/m ³
UK oes/mel:	TWA: 0.5 mg/m ³
<i>Zinc oxide; ZnO</i>	
Austria	TWA: 5 mg/m ³
Australia TWA	5 mg/m ³ TWA
Belgium - 8 Hr TWA	10 mg/m ³ TWA
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m ³ TWA (as Zn)
Croatia - Occupational Exposure Limits - STELs (KGVIs)	10 mg/m ³ STEL [KGVII]
Czech Republic OEL	2 mg/m ³ TWA (as Zn)
Denmark	TWA: 4 mg/m ³
Greece - OEL	5 mg/m ³ TWA (fume)
Iceland - OEL - 8 Hour	4 mg/m ³ TWA Zn
Japan - TWAs	4 mg/m ³ OEL 1 mg/m ³ OEL
Finland	TWA: 2 mg/m ³ STEL: 10 mg/m ³
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m ³ TWA: 10 mg/m ³
German mak	TWA: 0.1 mg/m ³ TWA: 2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³ Ceiling / Peak: 4 mg/m ³
Hungary - Occupational Exposure Limits - TWAs	5 mg/m ³ TWA
Ireland	TWA: 2 mg/m ³ STEL: 10 mg/m ³
Korea - ISHA - Occupational Exposure Limits - TWAs	2 mg/m ³ TWA (dust, respirable fraction, Serial No. 275); 5 mg/m ³ TWA (fume, Serial No. 276)
Korea - ISHA - Occupational Exposure Limits - STELs	10 mg/m ³ STEL (fume, Serial No. 276)
Latvia - Occupational Exposure Limits - TWAs	0.5 mg/m ³ TWA
Malaysia - Occupational Exposure Limits - 5 mg/m ³ TWA (fume); 10 mg/m ³ TWA (dust) TWAs	
Norway	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Poland	STEL: 10 mg/m ³ TWA: 5 mg/m ³
Portugal	STEL: 10 mg/m ³ TWA: 2 mg/m ³
Romania - Occupational Exposure Limits - TWAs	5 mg/m ³ TWA (fume)
Russia TWA	0.5 mg/m ³ TWA 2271
Slovenia - Occupational Exposure Limits - TWAs	5 mg/m ³ TWA (respirable fraction, fume)
Spain OEL - Time Weighted Average (TWA):	STEL: 10 mg/m ³ TWA: 2 mg/m ³
Sweden - OEL - 8 Hour	5 mg/m ³ LLV
Switzerland	STEL: 3 mg/m ³ TWA: 3 mg/m ³
<i>Zinc sulphate mono hydrate; ZnSO₄·1H₂O</i>	
German mak	TWA: 0.1 mg/m ³ TWA: 2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³ Ceiling / Peak: 4 mg/m ³
<i>Copper (I) Oxide; Cu₂O</i>	
Austria	STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³
Finland	TWA: 1 mg/m ³
German mak	TWA: 0.01 mg/m ³ Ceiling / Peak: 0.02 mg/m ³
Poland	TWA: 0.2 mg/m ³
Switzerland	STEL: 0.2 mg/m ³ TWA: 0.1 mg/m ³
<i>Sodium borate; Na₂B₄O₇</i>	
Australia TWA	1 mg/m ³ TWA
Belgium - 8 Hr TWA	2 mg/m ³ TWA borate

Denmark	TWA: 1 mg/m ³
Greece - OEL	10 mg/m ³ TWA
Iceland - OEL - 8 Hour	1 mg/m ³ TWA
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 1 mg/m ³
Ireland	TWA: 1 mg/m ³ STEL: 3 mg/m ³
Korea - ISHA - Occupational Exposure Limits - TWAs	1 mg/m ³ TWA (anhydrous, Serial No. 239)
Malaysia - Occupational Exposure Limits - TWAs	1 mg/m ³ TWA
Norway	TWA: 1 mg/m ³ STEL: 3 mg/m ³
Portugal	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Switzerland	TWA: 1 mg/m ³
UK oes/mel:	STEL: 3 mg/m ³ TWA: 1 mg/m ³

Derived No Effect Level (DNEL)

No data available

Predicted No Effect Concentration (PNEC)

No data available.

8.2. Exposure controls

Engineering Measures to Reduce Exposure: Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection: Tightly fitting safety goggles
 Hand protection: Nitrile rubber (0.26 mm). Break through time. > 8 h.
 Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment.
 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.

Environmental exposure controls 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, white, yellow, grey, green.
Odor:	Not significant
Bulk density:	938 - 1088 kg/m ³
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 recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Decomposition Products:

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

Possibility of Hazardous Reactions:

None under normal processing.

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

10.6. Hazardous decomposition products

None under normal processing.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information:

Inhalation:	May cause irritation of respiratory tract.
Eye Contact:	Causes serious eye damage.
Skin Contact:	May cause irritation.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Unknown Acute Toxicity:	4% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral): 33,249.00 mg/kg

Skin Corrosion or Irritation	See also section 3.
Serious Eye Damage or Eye Irritation	See also section 3.
Sensitization	See also section 3.
Mutagenic effects	See also section 3.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive Toxicity

Chemical Name	EU - GHS - SV - CLP (1272/2008) - Reproductive Toxicity
Sodium borate; Na ₂ B ₄ O ₇	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May damage the unborn child. (C >= 4.5 %)
Teratogenicity	No known effects under normal use conditions.
STOT - Single Exposure-Category 3 (H335)	No known effects under normal use conditions.
STOT - Repeated Exposure	None under normal use conditions.
Aspiration Hazard	None under normal use.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

10% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ammonium Nitrate; NH ₄ NO ₃		65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	
Potassium sulphate; K ₂ SO ₄	2900: 72 h Desmodesmus	653: 96 h Lepomis macrochirus	890: 48 h Daphnia magna mg/L

	subspicatus mg/L EC50	mg/L LC50 3550: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 510 - 880: 96 h <i>Pimephales promelas</i> mg/L LC50 static	EC50
Iron sulphate; FeSO ₄ +1H ₂ O		925: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 0.56: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static	152: 48 h <i>Daphnia magna</i> mg/L EC50 6.15 - 9.26: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Copper sulphate anh; CuSO ₄		0.1: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	0.024: 48 h <i>Daphnia magna</i> mg/L EC50
Copper (I) Oxide; Cu ₂ O	65: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 0.021 - 0.037: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 0.055 - 0.076: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static		0.51: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium borate; Na ₂ B ₄ O ₇	158: 96 h <i>Desmodesmus subspicatus</i> mg/L	340: 96 h <i>Limanda limanda</i> mg/L LC50	1085 - 1402: 48 h <i>Daphnia magna</i> mg/L LC50

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Component	LOGPOW
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (30 - 60%)	-3.1

12.4. Mobility in soil

No data available.

12.5. Results of 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 re-use empty containers. Dispose of as unused product.

Other Information:

Use up product completely. Packaging material is industrial waste.

Section 14: TRANSPORT INFORMATION

Hazchem code: 1Z

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)
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Marine Pollutant:

Not regulated

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/RID14.1

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 186, 193

IATA14.1

UN-No: 2071

14.2

Proper shipping name: AMMONIUM NITRATE BASED FERTILIZER

14.3

Hazard Class: 9

14.4

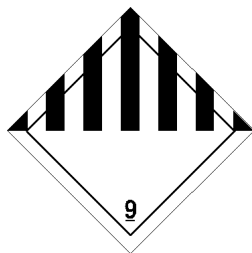
Packing group: III

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****REACH:**

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (30 - 60%)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (< 0.1%)	Use restricted. See item 30.

No data available

National regulations*Belgium*

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention

Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (30 - 60%)	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)
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Denmark

Danish Sikkerhedsgruppe

Not regulated

France

ICPE

Not regulated

Germany

Component	German WGK Section
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (30 - 60%)	class 1
Potassium sulphate; K ₂ SO ₄ 7778-80-5 (10 - 30%)	class 1
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7 (0.1 - 1%)	class 1
Copper sulphate anh; CuSO ₄ 7758-98-7 (0.1 - 1%)	class 2
Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7 (0.1 - 1%)	class 1
Zinc oxide; ZnO 1314-13-2 (< 0.1%)	class 2
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O 7446-19-7 (< 0.1%)	class 3
Copper (I) Oxide; Cu ₂ O 1317-39-1 (< 0.1%)	class 3
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 (< 0.1%)	class 1

European Union

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

15.2 Chemical safety assessment

Not required. 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**

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

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
- 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.

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

Issue Date: 23-Jun-2016

Revision Date: 13-Jul-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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End of Safety Data Sheet