Safety Data Sheet

Issue Date 01-May-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 14-14-14

Product Code: 76040225EA

Synonyms: Osmocote 14-6.1-11.6

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

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Regulation (EC) 1272/2008	REACH registration number
A NILL NIO	000 047 0	0404.50.0	05 400/	[CLP]	04 0440400004 07
Ammonium nitrate; NH ₄ NO ₃	229-347-8	6484-52-2	25 - 40%	Eye Irrit. 2 (H319)	01-2119490981-27
				Ox. Sol. 3 (H272)	
Calcium sulphate dihydrate;	231-900-3	10101-41-4	1 - 5%	Not classified	01-2119444918-26
CaSO ₄ +2H ₂ O					
Calcium fluoride; CaF ₂	232-188-7	7789-75-5	0.1 - 1%	Not classified	Exempt
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. 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

<u>Suitable Extinguishing Media:</u> Coordinate fire extinguishing measures to fire in surrounding

area. Flooding quantities of water.

<u>Unsuitable Extinguishing Media:</u> 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.

Wear 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.

Prevent product from entering drains.

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

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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 $^{\circ}\text{C}$ and 40 $^{\circ}\text{C}$.

Packaging Materials: LGK (Germany) Store in original container. Store in a closed container. Exempt

7.3. Specific end use(s)

Specific use(s)
Exposure scenario

Fertilizer; www.everris.com; Read and follow label instructions Mixture. Not required.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ammonium nitrate; NH₄NO₃				
Australia	N.A.			
Czech Republic OEL	10.0 mg/m³ TWA			
Calcium sulphate dihydrate; CaSO4+2H2O				
Belgium - 8 Hr TWA	10 mg/m³ TWA			
Portugal	TWA: 10 mg/m ³			
Spain - Valores Limite Ambientales - VLE	TWA: 10 mg/m ³			
Switzerland	TWA: 3 mg/m ³			
UK EH40 WEL (8h)	10 mg/m³ TWA (Inhalable)			
. ,	4 mg/m³ TWA (Respirable)			
Calcium fluoride; CaF2				
Denmark	TWA: 2.5 mg/m ³			
Ireland	TWA: 2.5 mg/m ³			
	STEL: 7.5 mg/m ³			
Latvia - OEL - TWAs	0.5 mg/m³ TWA (as F, listed under Hydrofluoric acid salts)			
Poland	TWA: 2 mg/m ³			
Portugal	TWA: 2.5 mg/m ³			
Romania - OEL - TWAs	1 mg/m³ TWA			
Russia TWA	0.5 mg/m³ TWA 1104			
Magnesium oxide; MgO				
Austria	STEL 10 mg/m ³			
	TWA: 5 mg/m ³			
Australia	10 mg/m³ TWA fume			
Belgium - 8 Hr TWA	10 mg/m ³			
Bulgaria - OEL- TWAs	10.0 mg/m³ TWA			
Czech Republic OEL	5 mg/m³ TWA			
Denmark	TWA: 6 mg/m ³			
FR - OEL - 8h VMEs	TWA: 10 mg/m ³			
Hungary - OEL - TWAs	6 mg/m³ TWA			
Iceland - OEL - 8 Hour	6 mg/m³ TWA Mg			
Ireland	TWA: 4 mg/m ³			
	STEL: 10 mg/m ³			
Korea - ISHA - OEL - TWAs	10 mg/m³ TWA (Serial No. 277)			
Malaysia	10 mg/m³ TWA (fume)			
Norway	TWA: 10 mg/m ³			
	STEL: 20 mg/m ³			
Poland	TWA: 10 mg/m³			
Portugal	TWA: 10 mg/m ³			
Romania - OEL - TWAs	5 mg/m³ TWA (fume)			
Spain - Valores Limite Ambientales - VLE	TWA: 10 mg/m ³			
Singapore - OEL:PELs	10 mg/m³ PEL			
Switzerland	TWA: 3 mg/m ³			
UK EH40 WEL (8h)	10 mg/m ³			

Derived No Effect Level (DNEL)

Dermal	Inhalation
5.12 mg/kg bw/day	8.9 mg/m ³

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 ₄ NO ₃ 6484-52-2 (25 - 40%)						18 mg/l

8.2. Exposure controls

Personal protective equipment

Eye/Face Protection Tightly fitting safety goggles

Hand protection Nitrile rubber (0.26 mm). Break through time. > 8h.

Respiratory Protection No personal respiratory protective equipment normally required

Skin and body protection: Wear normal, light working clothing

Hygiene Measures: Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away

from food, drink and animal feeding stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State: Solid Appearance: Granules Color: brown. Odor: None **Bulk density:** ± 1092 kg/m³ **Melting Point/Freezing Point:** No data available Boiling Point/Range: Solid. Not applicable. Flash Point: Solid. Not applicable. Solid. Not applicable. **Evaporation Rate:** 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

Decomposition temperature:No data available **Explosive Properties:**Doesn't present explosion hazard.

9.2. Other information

Partition Coefficient:

Autoignition Temperature:

VOC Content (%): Solid. Not applicable.

Section 10: STABILITY AND REACTIVITY

Solid. Not applicable.

No data available

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; NH₄NO₃	= 2217 mg/kg (Rat)	> 5000 mg/kg	> 88.8 mg/L (Rat) 4 h
Calcium fluoride; CaF ₂	= 4250 mg/kg (Rat)		
Magnesium oxide; MgO	= 3870 mg/kg (Rat) =		
	3990 mg/kg (Rat)		

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 Classification based on individual ingredients of the mixture.

Germ Cell Mutagenicity Classification based on individual ingredients of the mixture.

Carcinogenicity Classification based on individual ingredients of the mixture.

Reproductive ToxicityClassification based on individual ingredients of the mixture.

STOT - Single Exposure Classification based on individual ingredients of the mixture.

STOT - Repeated ExposureClassification 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
Unknown Aquatic Toxicity

Should not be released into the environment 6% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

	Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Γ	Ammonium nitrate;	-	65 - 85: 48 h Cyprinus	-	-
	NH4NO3		carpio mg/L LC50		
			semi-static		

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; NH₄NO₃	-3.1

12.4. Mobility in soilNo data available.12.5. PBT and vPvB assessmentNo data available.12.6. Other adverse effectsNo 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: Not regulated

14.2

Proper shipping name: Not regulated

14.3

Hazard Class: Not regulated

14.4

Packing group: Not regulated

14.5

Marine Pollutant: Not regulated

14.6

Special Provisions None

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

<u>14.1</u> 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

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 Accident Prevention
Ammonium nitrate; NH ₄ NO ₃	2500 tonne (technical grade; (a) this applies	350 tonne
6484-52-2 (25 - 40%)	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)	

Denmark

Denmark No data available

France

ICPE Classified installation: article 1331 (Type III)

Germany

LGK (Germany) Exempt

Water Endangering Class (WGK): 1 (Everris classification)

Gefahrstoffverordnung (Germany) TRGS 511 C III

Component	German WGK Section	
Ammonium nitrate; NH₄NO₃	1	
6484-52-2 (25 - 40%)		
Calcium sulphate dihydrate; CaSO ₄ +2H ₂ O	1	
10101-41-4 (1 - 5%)		
Calcium fluoride; CaF2	1	
7789-75-5 (0.1 - 1%)		
Magnesium oxide; MgO	1	
1309-48-4 (< 0.1%)		

•	EU - Explosives Precursors Marketing and Use (98/2013) - Substances Subject to	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous
	Suspicious Transactions Reporting	Substances
	Present (in concentration of 16% by weight of Nitrogen in relation to Ammonium nitrate or	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
0404-32-2 (23 - 40%)	higher)	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; NH4NO3	Use restricted. See item 58.	

Chemical Name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
	350	2500
Ammonium nitrate; NH₄NO₃		

Section 16: OTHER INFORMATION

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

- H319 Causes serious eye irritation
- H272 May intensify fire; oxidizer

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)

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Reason for revision *** Indicates changes since the last revision. This version

replaces all previous versions

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