

Issue Date no data available	Revision Date 08-Nov-2017	Version: 1.01	
1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING			
Product Identifier:			
Product Name:	Osmocote Plus Patterned Release Fertilizer with Micronutrients 15-9-12 Lo	-Start (8-9M)	
Other Means of Identification:			
Product ID:	A903246C		
Synonyms:	None		
Recommended Use of the Chemica	al and Restrictions on Use:		
Recommended Use:	Controlled Release Fertilizer		
Uses Advised Against:	No information available		
Details of the Supplier of the Safety Data Sheet:			
Initial Supplier Identifier Everris NA Inc. P.O. Box 3310 Dublin, OH 43016			
Emergency Telephone Numbers:			
Emergency Telephone	CHEMTREC (U.S.): 1-800-424-9300 CHEMTREC (International): 1-703-527-3887 Non-Emergency Calls: 1-800-492-8255		
2. HAZARDS IDENTIFICATION			

Classification 67/548/EEC

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements:

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Other Information:

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ammonium Nitrate; NH4NO3 6484-52-2	6484-52-2	15-40	-	-
Copper sulphate anh; CuSO ₄ 7758-98-7	7758-98-7	<1	-	-
Sodium borate; Na2B4O7 1330-43-4	1330-43-4	<1	-	-

4. FIRST AID MEASURES

First Aid Measures:

Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Clean mouth with water and drink afterwards plenty of water.	
Most Important Symptoms and Effects (Acute and Chronic):		
Symptoms	No information available.	
Indication of Any Immediate Medical Attention and Special Treatment Needed:		
Note to physicians	Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	No information available.
Specific hazards arising from the chemical	No information available.
Specific methods: Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES			
Personal Precautions, Protective Equipment and Emergency Procedures:			
Personal precautions	Ensure adequate ventilation.		
Environmental Precautions:			
Environmental precautions	See Section 12 for additional Ecological Information.		
Methods and Material for Containment and Cleanup:			
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Pick up and transfer to properly labeled containers.		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
Conditions for Safe Storage, Includi	ing any Incompatibilities:

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure LimitsThis product, as supplied, does not contain any hazardous materials with occupational
exposure limits established by the region specific regulatory bodies.

Appropriate Engineering Controls:

Engineering controls Showers Eyewash stations Ventilation systems.

Individual Protection Measures, Such as Personal Protective Equipment:

Eye/face protectionNo special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:Physical State:SoAppearance:GrColor:ligOdor:EaOdor Threshold:No

Property pH: **Melting Point/Freezing Point: Boiling Point/Range:** Flash Point: **Evaporation Rate:** Flammability (solid, gas): Flammability Limits in Air: **Upper Flammability Limit:** Lower Flammability Limit: Vapor Pressure: Vapor Density: **Relative densitv** Water Solubility: Solubility in other Solvents: **Partition Coefficient:** Autoignition Temperature: **Decomposition Temperature:** Kinematic Viscosity: **Dynamic Viscosity: Explosive properties Oxidizing properties**

Other Information: Softening Point: Molecular Weight: VOC Content (%): Density: Bulk Density: Solid Granules light green Earthy No information available

Values

No information available No information available

No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available. No information available.

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Remarks: • Method

No information available No information available

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10. STABILITY AND REACTIVITY

Reactivity:	No information available.
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	None under normal processing.
Conditions to Avoid:	None known based on information supplied.
Incompatible Materials:	None known based on information supplied.
Hazardous Decomposition Products:	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

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

Product Information			
Inhalation	Specific test data for the substance or mixture is not available.		
Eye contact	Specific test data for the substance or mixture is not available.		
Skin contact	Specific test data for the substance or mixture is not available.		
Ingestion	Specific test data for the substance or mixture is not available.		
Information on Toxicological Effects:			
Symptoms	No information available.		
Numerical Measures of Toxicity			
Acute Toxicity			
The following values are calculated ATEmix (oral) ATEmix (dermal)	based on chapter 3.1 of the GHS document . 38,155.00 mg/kg 52,740.15 mg/kg		
Unknown acute toxicity	No information available		

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH4NO3 - 6484-52-2	= 2217 mg/kg (Rat)	Ne	> 88.8 mg/L (Rat)4 h
Copper sulphate anh; CuSO ₄ - 7758-98-7	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	Ne
Sodium borate; Na2B4O7 - 1330-43-4	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	Ne

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.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	Sodium borate; Na ₂ B ₄ O ₇ - 1330-43-4
ACGIH - Carcinogens	A4
IARC:	-
NTP Report on Carcinogens List -	•
OSHA	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ammonium Nitrate; NH4NO3 - 6484-52-2	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Copper sulphate anh; CuSO ₄ - 7758-98-7	-	0.1: 96 h Oncorhynchus mykiss mg/L LC50	-	0.024: 48 h Daphnia magna mg/L EC50
Sodium borate; Na ₂ B ₄ O ₇ - 1330-43-4	158: 96 h Desmodesmus subspicatus mg/L	340: 96 h Limanda limanda mg/L LC50	-	1085 - 1402: 48 h Daphnia magna mg/L LC50

Persistence and Degradability:

No information available.

Bioaccumulation:

No information available.

Component Information

Chemical Name	LOGPOW	
Ammonium Nitrate; NH4NO3 - 6484-52-2	-3.1	

Mobility:

Slightly soluble in water.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT:	Regulated
UN-No:	UN 2071
Proper shipping name:	AMMONIUM NITRATE BASED FERTILIZER
Hazard Class:	9
Packing group:	III
Special Provisions	Only for Aircraft or Vessel
IATA	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
IMO / IMDG	Regulated
UN-No:	UN 2071
Proper shipping name:	AMMONIUM NITRATE BASED FERTILIZER

Hazard Class:	9
Packing group:	111

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Not applied

International Regulations

The Rotterdam Convention

Ozone-depleting substances (ODS)Not appliedPersistent Organic PollutantsNot applied

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA:	Health hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
HMIS Health Rating	: Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X
TWA TWA (tir	EXPOSURE CONTROLS/PEI me-weighted average) STEL signation	RSONAL PROTECTIO STEL (Short Terr Limit)		Maximum limit value
Revision Date	08-Nov-201	7		
Revision Note: <u>Disclaimer</u> The information pro		5		laces all previous versions.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.