



Safety Data Sheet

Issue Date: no data available

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Version: 1.02

1. IDENTIFICATION

Product Identifier:

Product Name: Osmocote® Plus 15-9-12, 3-4 Month
Product Number(s): G903206
Formula No.: S12716

Recommended Use of the Chemical and Restrictions on Use:

Description: Controlled Release Fertilizer

Company:

Everris NA Inc.
P.O. Box 3310
Dublin, OH 43016

24-HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-800-492-8255

2. HAZARD(S) IDENTIFICATION

OSHA Regulatory Status:

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not Hazardous:

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

Label Elements:

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance: granulate

Physical State: Solid

Odor:

Fertilizer

Hazards Not Otherwise Classified (HNOC):

Other Information:

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity:

1.446% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Ammonium Nitrate; NH4NO3	6484-52-2	40-60	*

Potassium sulphate; K ₂ SO ₄	7778-80-5	20-30	*
Coating	PROPRIETARY	5-10	*
Iron (III) Phosphate	10045-86-0	1-3	*
Copper sulphate anh; CuSO ₄	7758-98-7	<1	*
Sodium borate; Na ₂ B ₄ O ₇	1330-43-4	<1	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

First Aid Measures:

Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam.

Specific hazards: Dust clouds may be explosive.

Hazardous Combustion Products: Combustion can produce toxic fumes and irritating gases.

Explosion Data:

Sensitivity to Mechanical Impact:

no data available.

Sensitivity to Static Discharge:

no data available.

Special Protective Equipment for Firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Personal Precautions: Wear personal protective equipment.

Environmental Precautions: Prevent product from entering drains.

Methods and Material for Containment and Cleanup:

Methods for containment: Use good housekeeping practices. Clean up promptly by sweeping or vacuum.
Methods for Cleanup: If material is uncontaminated, collect and reuse as recommended for product.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handling: Avoid container breakage.

Conditions for Safe Storage, Including any Incompatibilities:

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Ammonium Nitrate; NH4NO3	6484-52-2	N.A.	N.A.	Not Listed
Potassium sulphate; K2SO4	7778-80-5	Not Listed	Not Listed	Not Listed
Coating	PROPRIETARY	Not Listed	Not Listed	Not Listed
Iron (III) Phosphate	10045-86-0	1 mg/m ³ TWA	Not Listed	Not Listed
Copper sulphate anh; CuSO4	7758-98-7	1 mg/m ³ TWA	Not Listed	100 mg/m ³ IDLH Cu
Sodium borate; Na2B4O7	1330-43-4	2 mg/m ³ TWA	Not Listed	Not Listed

Appropriate Engineering Controls:

Engineering Measures to Reduce Exposure: Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Individual Protection Measures, Such as Personal Protective Equipment:

Eye/Face Protection: Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur. Safety glasses.

Skin and Body Protection: No special protective clothing is required under normal workplace conditions. If skin irritation occurs, use natural rubber gloves, durable cloth or impervious rubber gloves if contact with product is possible.

Respiratory Protection: When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.

General hygiene considerations: Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:

Physical State: Solid
Color: Tan, brown
Odor: Fertilizer
Appearance: granulate
Odor: No information available
Threshold:

<u>Property</u>	<u>Values</u>	<u>Remarks: • Method</u>
pH:	No information available	
Melting Point/Freezing Point:	No information available	
Boiling Point/Range:	No information available	
Flash Point:	No information available	
Evaporation Rate:	No information available	
Flammability (solid, gas):	No information available	
Flammability Limits in Air:		
Upper Flammability Limit:	No information available	
Lower Flammability Limit:	No information available	
Vapor Pressure:	No information available	
Vapor Density:	No information available	
Specific Gravity:	No information available	
Solubility:	No information available	
Solubility in other Solvents:	No information available	
Partition Coefficient:	No information available	
Autoignition Temperature:	No information available	
Decomposition Temperature:	No information available	
Kinematic Viscosity:	No information available	
Dynamic Viscosity:	No information available	
Explosive Properties:	No information available	
Oxidizing Properties:	Not considered an oxidizer	

Other Information:

Softening Point:	No information available
Molecular Weight:	No information available
VOC Content (%):	No information available
Density:	No information available
Bulk density:	50-70 lbs/cu.ft.

10. STABILITY AND REACTIVITY

<u>Reactivity:</u>	Stable under normal conditions
<u>Chemically Stable:</u>	yes.
<u>Conditions to Avoid:</u>	Damp or wet conditions. Extreme heat.
<u>Materials to avoid</u>	Oxidizing agent.
<u>Hazardous Decomposition Products:</u>	Toxic fumes and gases may be generated. Metal oxides possible.
<u>Possibility of Hazardous Reactions:</u>	Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

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

<u>Eye effects:</u>	May cause eye irritation with susceptible persons
<u>Skin effects:</u>	May cause skin irritation in susceptible persons
<u>Ingestion:</u>	Health injuries are not known or expected under normal use.

Inhalation: Health injuries are not known or expected under normal use.

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH4NO3 6484-52-2	= 2217 mg/kg (Rat)	-	> 88.8 mg/L (Rat) 4 h
Potassium sulphate; K2SO4 7778-80-5	= 6600 mg/kg (Rat)	-	-
Copper sulphate anh; CuSO4 7758-98-7	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	-
Sodium borate; Na2B4O7 1330-43-4	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-

Information on Toxicological Effects:

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

Mutagenic effects No information available.
Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Sodium borate; Na2B4O7 1330-43-4	A4	-	-	-

Reproductive Toxicity No information available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.
Aspiration Hazard No information available.

Numerical Measures of Toxicity - Product Information:

Unknown Acute Toxicity: 1.446% 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): 37631 mg/kg
ATEmix (dermal): 52015 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Unknown Aquatic Toxicity: 24.146% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects: Toxic to aquatic life with long lasting effects.

Persistence and degradability: Not rapidly degradable.

Ingredients	LOGPOW
Ammonium Nitrate; NH4NO3 6484-52-2	-3.1

Mobility: Water contaminating.

Additional ecological information: Contains Molybdenum (Mo). The application of materials containing Molybdenum (Mo) may result in forage crops containing levels of Molybdenum (Mo) which are toxic to ruminant animals. Do not apply directly to lakes, streams, or ponds.

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

- DOT (Land)** Not DOT regulated
- DOT (AIR)** UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
- DOT (Vessel)** UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
- IATA (Air)** UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
- IMO/IMDG (Vessel)** UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII

15. REGULATORY INFORMATION

Federal Regulations:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories:

- | | |
|--|----|
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act):

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Ingredients	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Copper sulphate anh; CuSO4 7758-98-7	-	-	-	Present

CERCLA:

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Ingredients	CERCLA/SARA 313	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium Nitrate; NH4NO3 6484-52-2	Not listed	-	--
Copper sulphate anh; CuSO4 7758-98-7	10 lb final RQ 4.54 kg final RQ	-	--

State Regulations (RTK):

California Proposition 65:

U.S. State Right-to-Know Regulations:

U.S. EPA Label information:

EPA Pesticide Registration Number:

not applicable

16. OTHER INFORMATION

NFPA: Health: 1 Flammability: 0 Reactivity: 1

HMIS: Health: 1 Flammability: 0 Reactivity: 1

Revision Date: 08-Sep-2014

Revision Note:

Reason for revision: None

Disclaimer

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.

End of Safety Data Sheet