



MATERIAL SAFETY DATA SHEET

Date stamp: 24-Sep-2013

MSDS Ref. No.: E903226

Revision Number: 1.01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Osmocote Plus 15-9-12, 5-6 Months

Description: Controlled Release Fertilizer

Company

Everris NA Inc.

P.O. Box 3310

Dublin, OH 43016

Formula No.: S14311

Product Number(s): E903226

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. Hazards Identification

Labelling

Signal Word:

CAUTION

precautionary statements

Do not ingest. Do not inhale. Keep out of reach of children and domestic animals.

Potential Health Effects

Eye contact:

Contact with eyes may cause irritation.

Skin contact:

Irritation not expected.

Ingestion:

Considered practically non-toxic. Possible gastrointestinal tract irritation.

Inhalation:

May cause irritation of respiratory tract.

Aggravated Medical Conditions:

Inhalation may aggravate asthma.

Principle routes of exposure:

skin, EYES, Inhalation

Target Organ Effects:

irritation.

3. Composition/Information on Ingredients

Ingredients	CAS-No	Weight %
Ammonium Nitrate; NH ₄ NO ₃	6484-52-2	30 - 40
Potassium sulphate; K ₂ SO ₄	7778-80-5	10 - 30
Ammonium phosphate (US)	7722-76-1	10 - 30
Potassium Nitrate; KNO ₃	7757-79-1	10 - 30
Ammonium sulphate; (NH ₄) ₂ SO ₄	7783-20-2	5 - 10
Calcium phosphate; Ca ₃ (PO ₄) ₂	7758-87-4	5 - 10
Magnesium sulphate anhydrous; MgSO ₄	7487-88-9	1 - 5
Calcium Carbonate; CaCO ₃	471-34-1	1 - 5
Magnesium oxide; MgO	1309-48-4	1 - 5
Iron EDTA; Fe-EDTA	15708-41-5	1 - 5
Potassium chloride; KCl	7447-40-7	1 - 5
Iron sulphate; FeSO ₄ ·7H ₂ O	7782-63-0	0.1 - 1
Manganese sulphate; MnSO ₄ ·1H ₂ O	7785-87-7	0.1 - 1
Boric Acid; H ₃ BO ₃	10043-35-3	0.1 - 1
Sodium molybdate; Na ₂ MoO ₄ ·2H ₂ O	7631-95-0	< 0.1
Zinc Sulfate Anhydrous	7733-02-0	< 0.1
Copper sulphate anh; CuSO ₄	7758-98-7	< 0.1
Zinc oxide; ZnO	1314-13-2	< 0.1

4. 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.
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.
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.

5. Fire-fighting measures

Flammable properties:	Decomposes on heating.
Suitable extinguishing media:	Water spray, carbon dioxide, dry chemical, chemical foam.
Explosion potential:	Dust clouds may be explosive.
Hazardous combustion products	Combustion can produce toxic fumes and irritating gases.
Fire fighting procedures:	Select appropriate method to surround and extinguish fire.
Special protective equipment for firefighters:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal Precautions:	Wear personal protective equipment.
Environmental Precautions:	Prevent product from entering drains.
Methods for containment:	Use good housekeeping practices. Clean up promptly by sweeping or vacuum.
Methods for cleaning up:	If material is uncontaminated, collect and reuse as recommended for product.

7. Handling and Storage

Handling: Avoid container breakage.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	CAS-No	ACGIH:	OSHA:
Ammonium Nitrate; NH ₄ NO ₃	6484-52-2	N.A.	N.A.
Potassium sulphate; K ₂ SO ₄	7778-80-5	Not Listed	Not Listed
Ammonium phosphate (US)	7722-76-1	Not Listed	Not Listed
Potassium Nitrate; KNO ₃	7757-79-1	Not Listed	Not Listed
Ammonium sulphate; (NH ₄) ₂ SO ₄	7783-20-2	Not Listed	Not Listed
Calcium phosphate; Ca ₃ (PO ₄) ₂	7758-87-4	Not Listed	Not Listed
Magnesium sulphate anhydrous; MgSO ₄	7487-88-9	Not Listed	Not Listed
Calcium Carbonate; CaCO ₃	471-34-1	Not Listed	Not Listed
Magnesium oxide; MgO	1309-48-4	10 mg/m ³ TWA	15 mg/m ³ TWA
Iron EDTA; Fe-EDTA	15708-41-5	Not Listed	Not Listed
Potassium chloride; KCl	7447-40-7	Not Listed	Not Listed
Iron sulphate; FeSO ₄ ·7H ₂ O	7782-63-0	Not Listed	Not Listed
Manganese sulphate; MnSO ₄ ·1H ₂ O	7785-87-7	Not Listed	Not Listed
Boric Acid; H ₃ BO ₃	10043-35-3	2 mg/m ³ TWA	Not Listed
Sodium molybdate; Na ₂ MoO ₄ ·2H ₂ O	7631-95-0	Not Listed	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	Not Listed	Not Listed
Copper sulphate anh; CuSO ₄	7758-98-7	Not Listed	Not Listed
Zinc oxide; ZnO	1314-13-2	2 mg/m ³ TWA	5 mg/m ³ TWA 15 mg/m ³ TWA

Engineering Controls

Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal protective equipment**Eye/face Protection**

Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur.

Skin and body protection:

Wear suitable protective clothing if contact is anticipated during manufacturing. Impervious gloves.

Respiratory Protection:

If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.

General hygiene considerations:

Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

Solid

Color:

Tan

Bulk density:

65-70 lbs/cu.ft.

Flash Point:

not applicable

Appearance:

granulate

Odor:

Fertilizer

10. STABILITY AND REACTIVITY

Chemically Stable:

yes.

Conditions to Avoid

Damp or wet conditions. Take precautionary measures against static discharges. Extreme heat.

Materials to avoid

Oxidizing agent.

Hazardous decomposition products:

Toxic fumes and gases may be generated. Metal oxides possible.

Possibility of Hazardous Reactions

Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity**

Eye effects: Contact with eyes may cause irritation

Skin effects: May cause skin irritation and/or dermatitis

Chronic Toxicity

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

General information

Very low toxicity for humans and animals

Ingestion:

Health injuries are not known or expected under normal use.

Inhalation

Health injuries are not known or expected under normal use.

Target Organ Effects:

irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects:

No data is available on the product itself.

Persistence and degradability:

Inherently biodegradable. Non-persistent.

Bioaccumulative potential:

Does not bioaccumulate.

Mobility:

Water contaminating.

Aquatic toxicity:

May be beneficial to plant life.

Additional ecological information:

Do not apply directly to lakes, streams, or ponds. 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.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:

Apply as fertilizer to field. Dispose of in accordance with local regulations and national regulations.

Contaminated packaging:

Do not re-use empty containers. If empty, place in trash or offer for recycling if available.

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

15. REGULATORY INFORMATION

Ingredients	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Ammonium Nitrate; NH_4NO_3	6484-52-2	Not listed	Not Listed
Iron sulphate; $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$	7782-63-0	1000 lb final RQ Ferrous sulfate 454 kg final RQ Ferrous sulfate	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	1000 lb final RQ 454 kg final RQ	Not Listed
Copper sulphate anh; CuSO_4	7758-98-7	10 lb final RQ 4.54 kg final RQ	Not Listed

General information

Contact local authorities for disposal of large quantities of product.

16. OTHER INFORMATION**NFPA:** Health: 2 Flammability: 1 Reactivity: 0**HMIS:** Health: 2 Flammability: 0 Reactivity: 1

Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

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