



# MATERIAL SAFETY DATA SHEET

Date stamp: 28-Sep-2012

MSDS Ref. No.: E90182

Revision Number: 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Osmocote Pro 17-5-11 12-14M  
**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

**Formula No.:** S14072  
**Product Number(s):** E90182

## 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, Inhalation, Ingestion

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %
Ammonium Nitrate, NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	30-60
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	7778-80-5	10-30
Ammonium phosphate	7722-76-1	7-13
Sulphur, S	7704-34-9	5-10
Calciumphosphate, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	7758-87-4	3-7
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	1-5
Magnesium sulphate anhydrous, MgSO <sub>4</sub>	7487-88-9	0.1-1
Zinc Sulfate Anhydrous	7733-02-0	0.1-1
Copper sulphate anhydrous, CuSO <sub>4</sub> +0H <sub>2</sub> O	7758-98-7	0.1-1
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	7631-95-0	<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

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**5. FIRE-FIGHTING MEASURES**

<b>Flammable properties:</b>	Decomposes on heating.
<b>Suitable extinguishing media:</b>	Water spray, carbon dioxide, dry chemical, chemical foam
<b>Explosion potential:</b>	Dust clouds may be explosive.
<b>Explosive properties:</b>	No explosion risk.
<b>Hazardous combustion products:</b>	Combustion can produce toxic fumes and irritating gases.
<b>Fire fighting procedures:</b>	Select appropriate method to surround and extinguish fire
<b>Special protective equipment for firefighters:</b>	In the event of fire, wear self-contained breathing apparatus

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions:</b>	Wear personal protective equipment
<b>Environmental precautions:</b>	Prevent product from entering drains
<b>Methods for containment:</b>	Use good housekeeping practices. Clean up promptly by sweeping or vacuum.
<b>Methods for cleaning up:</b>	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 cool, well-ventilated place

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Ingredients	ACGIH:	OSHA:
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> ·2H <sub>2</sub> O	0.5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA
Copper sulphate anhydrous, CuSO <sub>4</sub> ·0H <sub>2</sub> O	Not Listed	Not Listed
Sulphur, S	Not Listed	Not Listed
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	Not Listed	Not Listed
Ferrous Sulfate Monohydrate (Iron Sulfate)	1 mg/m <sup>3</sup> TWA	Not Listed
Magnesium sulphate anhydrous, MgSO <sub>4</sub>	Not Listed	Not Listed
Zinc Sulfate Anhydrous	Not Listed	Not Listed
Ammonium Nitrate, NH <sub>4</sub> NO <sub>3</sub>	N.A.	N.A.
Calciumphosphate, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	Not Listed	Not Listed
Ammonium phosphate	Not Listed	Not Listed

**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**

<b>Physical State:</b>	Solid	<b>Color:</b>	Brown, Tan
<b>Bulk density:</b>	60-65 lbs/cu.ft.	<b>Flash point:</b>	Not applicable
<b>Appearance:</b>	Granular		

**10. STABILITY AND REACTIVITY**

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<b>Chemically Stable:</b>	Yes
<b>Conditions to avoid</b>	Damp or wet conditions. Extreme heat.
<b>Materials to avoid:</b>	Oxidizing agent.
<b>Hazardous decomposition products:</b>	Toxic fumes and gases may be generated. Metal oxides possible.
<b>Possibility of hazardous reactions:</b>	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 .

Ingredients	NTP:	IARC:	OSHA:
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	Not listed	Not listed	Not listed
Copper sulphate anhydrous, CuSO <sub>4</sub> +0H <sub>2</sub> O	Not listed	Not listed	Not listed
Sulphur, S	Not listed	Not listed	Not listed
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	Not listed	Not listed	Not listed
Ferrous Sulfate Monohydrate (Iron Sulfate)	Not listed	Not listed	Not listed
Magnesium sulphate anhydrous, MgSO <sub>4</sub>	Not listed	Not listed	Not listed
Zinc Sulfate Anhydrous	Not listed	Not listed	Not listed
Ammonium Nitrate, NH <sub>4</sub> NO <sub>3</sub>	Not listed	Not listed	Not listed
Calciumphosphate, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	Not listed	Not listed	Not listed
Ammonium phosphate	Not listed	Not listed	Not listed

**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

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity effects:</b>	No data is available on the product itself.
<b>Persistence and degradability:</b>	Inherently biodegradable. Non-persistent.
<b>Bioaccumulative potential:</b>	Does not bioaccumulate.
<b>Mobility:</b>	Slightly water contaminating.
<b>Aquatic toxicity:</b>	May be beneficial to plant life.
<b>Additional ecological information:</b>	Do not apply directly to lakes, streams, or ponds.

**13. DISPOSAL CONSIDERATIONS**

<b>Waste Disposal Methods:</b>	Apply as fertilizer to field. Dispose of in accordance with local regulations and national regulations.
<b>Contaminated packaging:</b>	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.

<b>DOT (Land)</b>	Not DOT regulated
<b>DOT (AIR)</b>	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
<b>DOT (Vessel)</b>	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII

**15. REGULATORY INFORMATION**

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Ingredients	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	7631-95-0	Not Listed	Not Listed
Copper sulphate anhydrous, CuSO <sub>4</sub> +0H <sub>2</sub> O	7758-98-7	10 lb final RQ 4.54 kg final RQ	Not Listed
Sulphur, S	7704-34-9	Not Listed	Not Listed
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	7778-80-5	Not Listed	Not Listed
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	1000 lb final RQ 454 kg final RQ	Not Listed
Magnesium sulphate anhydrous, MgSO <sub>4</sub>	7487-88-9	Not Listed	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	1000 lb final RQ 454 kg final RQ	Not Listed
Ammonium Nitrate, NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	Not listed	Not Listed
Calciumphosphate, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	7758-87-4	Not Listed	Not Listed
Ammonium phosphate	7722-76-1	Not Listed	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: 1 Reactivity: 0**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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