



# MATERIAL SAFETY DATA SHEET

Date stamp: 27-Sep-2012

MSDS Ref. No.: E90170

Revision Number: 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Osmocote Pro 20-4-8 8-9M  
**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.:** S14375  
**Product Number(s):** E90170

## 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
Urea	57-13-6	10-30
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	7778-80-5	10-30
Ammonium phosphate	7722-76-1	7-13
Calciumphosphate, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	7758-87-4	3-7
Magnesium sulphate anhydrous, MgSO <sub>4</sub>	7487-88-9	0.1-1
Magnesium oxide, MgO	1309-48-4	0.1-1
Iron Oxide, Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	0.1-1
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	0.1-1
Manganese Oxide, MnO	1344-43-0	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	0.01-0.1
Copper Oxide, CuO	1317-38-0	0.01-0.1

## 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. May burn under fire conditions.  
**Suitable extinguishing media:** Water spray, carbon dioxide, dry chemical, chemical foam  
**Explosion potential:** Dust clouds may be explosive.  
**Explosive properties:** No explosion risk.  
**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 cool, well-ventilated place

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	ACGIH:	OSHA:
Urea	Not Listed	Not Listed
Iron Oxide, Fe <sub>2</sub> O <sub>3</sub>	5 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA
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
Copper sulphate anhydrous, CuSO <sub>4</sub> +0H <sub>2</sub> O	Not Listed	Not Listed
Copper Oxide, CuO	Not Listed	Not Listed
Manganese Oxide, MnO	0.2 mg/m <sup>3</sup> TWA	Not Listed
Magnesium oxide, MgO	10 mg/m <sup>3</sup> TWA	15 mg/m <sup>3</sup> TWA total
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
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	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

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

**10. STABILITY AND REACTIVITY**

<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:
Urea	Not listed	Not listed	Not listed
Iron Oxide, Fe <sub>2</sub> O <sub>3</sub>	Not listed	3	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
Copper sulphate anhydrous, CuSO <sub>4</sub> +0H <sub>2</sub> O	Not listed	Not listed	Not listed
Copper Oxide, CuO	Not listed	Not listed	Not listed
Manganese Oxide, MnO	Not listed	Not listed	Not listed
Magnesium oxide, MgO	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
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	Not listed	Not listed	Not listed

**General Information**

**Ingestion:** Very low toxicity for humans and animals  
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**

**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**

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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**

Ingredients	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Urea	57-13-6	Not Listed	Not Listed
Iron Oxide, Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	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
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
Copper Oxide, CuO	1317-38-0	Not Listed	Not Listed
Manganese Oxide, MnO	1344-43-0	Not Listed	Not Listed
Magnesium oxide, MgO	1309-48-4	Not Listed	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
Potassium sulphate, K <sub>2</sub> SO <sub>4</sub>	7778-80-5	Not Listed	Not Listed

**General Information** Contact local authorities for disposal of large quantities of product

**16. OTHER INFORMATION**

**NFPA:** Health: 2 Flammability: 0 Reactivity: 1

**HMIS:** Health: --- Flammability: --- Reactivity: ---

**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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