



# Safety Data Sheet

Revision Date 18-Jul-2019

Version: 1

## 1. IDENTIFICATION

**Product Identifier:**

**Product Name:** Osmocote Blend 12-6-6 Fe Mg Special 2-3M  
**Product Number(s):** A902701  
**Formula No.:** S20133

**Description:** Controlled Release Fertilizer

**Recommended Use of the Chemical and Restrictions on Use:**

Restricted to professional users

**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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion or Irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

**Label Elements:**

**Warning**

**Hazard Statements:**

Causes skin irritation  
Causes serious eye irritation  
May cause damage to organs through prolonged or repeated exposure



**Appearance:** Granules

**Physical State:** Solid

**Odor:** characteristic

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear protective gloves/eye protection/face protection

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of water and soap  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC):**

Not applied

**Other Information:**

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Ammonium phosphate (US)	7722-76-1	10 - 15%	*
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$	7785-87-7	1 - 5%	*
Iron sulphate; $\text{FeSO}_4 \cdot \text{H}_2\text{O}$	7720-78-7	1 - 5%	*
Zinc sulfate anh; $\text{ZnSO}_4$	7733-02-0	0.1 - 1%	*
Zinc oxide; $\text{ZnO}$	1314-13-2	0.1 - 1%	*
Copper (I) Oxide; $\text{Cu}_2\text{O}$	1317-39-1	0.1 - 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:** Call a poison control center or doctor for treatment advice. Take off contaminated clothing. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Inhalation** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a POISON CENTER or doctor.

**Ingestion:** Call a physician or Poison Control Centre immediately. Do not induce vomiting without medical advice. Never 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

**Unsuitable Extinguishing Media:** High volume water jet.

**Specific hazards:** No information available.

**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:** Do not allow product to enter the environment uncontrolled.

### Methods and Material for Containment and Cleanup:

**Methods for containment:** Clean up promptly by sweeping or vacuum.

**Methods for Cleanup:** Pick up and transfer to properly labelled containers. Use up product completely. Packaging material is industrial waste.

## 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 Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA:	ACGIH:	IDLH:
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ 7785-87-7	-	-	0.1 mg/m <sup>3</sup> TWA	500 mg/m <sup>3</sup> IDLH Mn
Iron sulphate; $\text{FeSO}_4 \cdot \text{H}_2\text{O}$ 7720-78-7	-	-	1 mg/m <sup>3</sup> TWA	-
Zinc oxide; $\text{ZnO}$ 1314-13-2	-	5 mg/m <sup>3</sup> TWA 15 mg/m <sup>3</sup> TWA	2 mg/m <sup>3</sup> TWA	500 mg/m <sup>3</sup> IDLH
Copper (I) Oxide; $\text{Cu}_2\text{O}$ 1317-39-1	-	-	1 mg/m <sup>3</sup> TWA	100 mg/m <sup>3</sup> IDLH Cu

### Appropriate Engineering Controls:

**Engineering Controls** Ensure adequate ventilation, especially in confined areas. Eyewash. Showers.

### Individual Protection Measures, Such as Personal Protective Equipment:

**Eye/face Protection** Wear safety glasses with side shields (or goggles).

**Hand Protection** Neoprene gloves.

**Skin and body protection** Lightweight protective clothing.

**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:	Solid
Color:	Multi-colored
Appearance:	Granules
Odor:	characteristic

<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:		
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	
Vapour density	No information available	
Relative density	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:	No information available	

### Other Information:

Softening Point:	No information available
Molecular Weight:	No information available
VOC Content (%):	No information available
Density:	No information available
Bulk density:	No information available

## 10. STABILITY AND REACTIVITY

<u>Reactivity:</u>	Stable under normal conditions
<u>Chemically Stable:</u>	Stable under recommended storage conditions.
<u>Materials to avoid</u>	Nitrogen oxides (NOx).
<u>Hazardous Decomposition Products:</u>	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
<u>Possibility of Hazardous Reactions:</u>	None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

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

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin Contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

**Information on Toxicological Effects:**

**Symptoms** No information available.

**Numerical Measures of Toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document: .**

**Oral LD50** 8,873.00

**Unknown Acute Toxicity:** No information available

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium phosphate (US) 7722-76-1	= 5750 mg/kg ( Rat )	> 7940 mg/kg ( Rabbit )	-
Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> O 7785-87-7	= 2125 mg/kg ( Rat )	-	-
Iron sulphate; FeSO <sub>4</sub> +1H <sub>2</sub> O 7720-78-7	= 500 mg/kg ( Rat )	= 155 mg/kg ( Rat )	-
Zinc sulfate anh; ZnSO <sub>4</sub> 7733-02-0	= 1710 mg/kg ( Rat )	-	-
Zinc oxide; ZnO 1314-13-2	> 5000 mg/kg ( Rat )	-	-
Copper (I) Oxide; Cu <sub>2</sub> O 1317-39-1	= 470 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	= 2.92 mg/L ( Rat ) 4 h = 3.69 mg/L ( Rat ) 4 h

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

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ Cell Mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>STOT - Single Exposure</b>	No information available.
<b>STOT - Repeated Exposure</b>	No information available.
<b>Aspiration Hazard</b>	No information available.

**12. ECOLOGICAL INFORMATION**

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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
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Iron sulphate; FeSO <sub>4</sub> ·1H <sub>2</sub> O 7720-78-7	-	925: 96 h Poecilia reticulata mg/L LC50 static 0.56: 96 h Cyprinus carpio mg/L LC50 semi-static	-	152: 48 h Daphnia magna mg/L EC50 6.15 - 9.26: 48 h Daphnia magna mg/L EC50 Static
Zinc sulfate anh; ZnSO <sub>4</sub> 7733-02-0	64.8: 72 h Chlorella vulgaris mg/L EC50 2.4: 96 h Chlorella vulgaris mg/L EC50 0.056: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	0.162: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.05: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.218 - 0.42: 96 h Pimephales promelas mg/L LC50 flow-through 0.34 - 0.93: 96 h Oncorhynchus mykiss mg/L LC50 static 0.06: 96 h Pimephales promelas mg/L LC50 static 0.48 - 1.72: 96 h Poecilia reticulata mg/L LC50 static 49.23 - 64.16: 96 h Poecilia reticulata mg/L LC50 semi-static 3.55 - 6.32: 96 h Lepomis macrochirus mg/L LC50 static 0.168 - 0.25: 96 h Pimephales promelas mg/L LC50 semi-static 0.15: 96 h Cyprinus carpio mg/L LC50 semi-static 16.85 - 27.18: 96 h Cyprinus carpio mg/L LC50 static 3 - 4.6: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.63: 96 h Poecilia reticulata mg/L LC50 0.23 - 0.48: 96 h Pimephales promelas mg/L LC50	-	0.538 - 0.908: 48 h Daphnia magna mg/L EC50 Static 0.75: 48 h Daphnia magna mg/L EC50
Copper (I) Oxide; Cu <sub>2</sub> O 1317-39-1	0.055 - 0.076: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.021 - 0.037: 96 h Pseudokirchneriella subcapitata mg/L EC50 65: 96 h Desmodesmus subspicatus mg/L EC50	-	-	0.51: 48 h Daphnia magna mg/L EC50

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Mobility:** No information available.

### 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 regulated  
**DOT (AIR)** Not regulated  
**DOT (Vessel)** Not regulated  
**IATA (Air)** Not regulated  
**IMO/IMDG (Vessel)** Not regulated

**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 does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Iron sulphate; FeSO <sub>4</sub> +1H <sub>2</sub> O 7720-78-7	-	-	-	Present
Zinc sulfate anh; ZnSO <sub>4</sub> 7733-02-0	-	-	-	Present

**CERCLA:**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	CERCLA/SARA 313	CERCLA/SARA RQ
Iron sulphate; FeSO <sub>4</sub> +1H <sub>2</sub> O 7720-78-7	1000 lb final RQ 454 kg final RQ	-
Zinc sulfate anh; ZnSO <sub>4</sub>	1000 lb final RQ	-

7733-02-0	454 kg final RQ	
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**California Proposition 65:**

This product does not contain any Proposition 65 chemicals.

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

**State Regulations (RTK):**

No information available

**U.S. EPA Label information:**

**EPA Pesticide Registration Number:**

Not applied

**16. OTHER INFORMATION**

<b>NFPA:</b>	<b>Health:</b> 2	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>HMIS:</b>	<b>Health:</b> ---	<b>Flammability:</b> ---	<b>Reactivity:</b> ---

**Prepared by**

**Revision Date**

**Reason for revision**

Regulatory Affairs Department

18-Jul-2019

\*\*\* Indicates changes since the last revision. This version replaces all previous versions

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**End of Safety Data Sheet**