



# Safety Data Sheet

Issue Date: no data available

Revision Date: 28-Aug-2015

Version: 1

## 1. IDENTIFICATION

**Product Identifier:**

**Product Name:** Osmocote Max 18-5-8, 5-6M  
**Product Number(s):** G90176  
**Formula No.:** S16365

**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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion or Irritation	Category 2
Serious Eye Damage or Eye Irritation	Category 2
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

**Label Elements:**

### Emergency Overview

**Warning**

**Hazard Statements:**

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



**Appearance:** granulate

**Physical State:** Solid

**Odor:**

Fertilizer

**Precautionary Statements - Prevention**

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

**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 soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

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

• MAY BE HARMFUL IF SWALLOWED

• Toxic to aquatic life with long lasting effects

**Unknown Acute Toxicity:**

1.591% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS-No	Weight %	Trade Secret
Ammonium Nitrate; $\text{NH}_4\text{NO}_3$	6484-52-2	20-40	*
Potassium sulphate; $\text{K}_2\text{SO}_4$	7778-80-5	10-20	*
Iron sulphate; $\text{FeSO}_4 \cdot \text{H}_2\text{O}$	7720-78-7	5-15	*
Di ammonium phosphate; $(\text{NH}_4)_2\text{HPO}_4$	7783-28-0	1-5	*
Iron-(III)-Sulfate (U.S.)	10028-22-5	1-5	*
Coating	PROPRIETARY	1-5	*
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$	7785-87-7	1-5	*
Magnesium oxide; $\text{MgO}$	1309-48-4	1-5	*
Ammonium sulphate; $(\text{NH}_4)_2\text{SO}_4$	7783-20-2	<1	*
Copper sulphate anh; $\text{CuSO}_4$	7758-98-7	<1	*
Zinc Sulfate anh; $\text{ZnSO}_4$	7733-02-0	<1	*
Inert Ingredients	PROPRIETARY	<1	*
Sodium borate; $\text{Na}_2\text{B}_4\text{O}_7$	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.

**Unsuitable extinguishing media:** High volume water jet.

**Specific hazards:** Dust clouds may be explosive.

**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. Avoid subsoil penetration.

**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. Avoid inhalation or contact with skin, eyes, or clothing. Keep out of reach of children and pets. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling. Do not contaminate water while cleaning equipment. this product is toxic to fish. Keep out of lakes, streams or ponds. Use proper protective equipment to minimize exposure.

**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; NH <sub>4</sub> NO <sub>3</sub>	6484-52-2	N.A.	N.A.	Not Listed
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	7778-80-5	Not Listed	Not Listed	Not Listed

Iron sulphate; FeSO <sub>4</sub> +1H <sub>2</sub> O	7720-78-7	1 mg/m <sup>3</sup> TWA	Not Listed	Not Listed
Di ammonium phosphate; (NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>	7783-28-0	Not Listed	Not Listed	Not Listed
Iron-(III)-Sulfate (U.S.)	10028-22-5	Not Listed	Not Listed	Not Listed
Coating	PROPRIETARY	Not Listed	Not Listed	Not Listed
Manganese sulphate; MnSO <sub>4</sub> +1H <sub>2</sub> O	7785-87-7	0.1 mg/m <sup>3</sup> TWA	Not Listed	500 mg/m <sup>3</sup> IDLH Mn
Magnesium oxide; MgO	1309-48-4	10 mg/m <sup>3</sup> TWA	15 mg/m <sup>3</sup> TWA	750 mg/m <sup>3</sup> IDLH
Ammonium sulphate; (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	7783-20-2	Not Listed	Not Listed	Not Listed
Copper sulphate anh; CuSO <sub>4</sub>	7758-98-7	1 mg/m <sup>3</sup> TWA	Not Listed	100 mg/m <sup>3</sup> IDLH Cu
Zinc Sulfate anh; ZnSO <sub>4</sub>	7733-02-0	Not Listed	Not Listed	Not Listed
Inert Ingredients	PROPRIETARY	Not Listed	Not Listed	Not Listed
Sodium borate; Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	1330-43-4	2 mg/m <sup>3</sup> 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:** Safety glasses with side shields, goggles, or face shield. Wear face-shield and protective suit for abnormal processing problems.

**Skin and Body Protection:** Wear suitable protective clothing. Impervious clothing.

**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:**

<b>Physical State:</b>	Solid	<b>Appearance:</b>	granulate
<b>Color:</b>	Blend	<b>Odor</b>	No information available
<b>Odor:</b>	Fertilizer	<b>Threshold:</b>	

<u>Property</u>	<u>Values</u>	<u>Remarks: • Method</u>
<b>pH:</b>	No information available	
<b>Melting Point/Freezing Point:</b>	No information available	
<b>Boiling Point/Range:</b>	No information available	
<b>Flash Point:</b>	No information available	
<b>Evaporation Rate:</b>	No information available	
<b>Flammability (solid, gas):</b>	No information available	
<b>Flammability Limits in Air:</b>		
<b>Upper Flammability Limit:</b>	No information available	
<b>Lower Flammability Limit:</b>	No information available	
<b>Vapor Pressure:</b>	No information available	
<b>Vapor Density:</b>	No information available	
<b>Specific Gravity:</b>	No information available	
<b>Solubility:</b>	No information available	
<b>Solubility in other Solvents:</b>	No information available	
<b>Partition Coefficient:</b>	No information available	
<b>Autoignition Temperature:</b>	No information available	
<b>Decomposition Temperature:</b>	No information available	
<b>Kinematic Viscosity:</b>	No information available	
<b>Dynamic Viscosity:</b>	No information available	
<b>Explosive Properties:</b>	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:** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity:** Stable under normal conditions

**Chemically Stable:** yes.

**Conditions to Avoid:** Environment. Dust may form explosive mixture in air.

**Materials to avoid** Chlorine compounds (sodium hypochlorite, sodium chlorate, pool chemicals, household bleach and other cleaning products). Strong oxidizing agents.

**Hazardous Decomposition Products:** Combustion produces caustic fumes.

**Possibility of Hazardous Reactions:** Poses little or no immediate hazard.

## 11. TOXICOLOGICAL INFORMATION

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

**Eye effects:** Causes serious eye irritation

**Skin effects:** Causes skin irritation

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May cause irritation of respiratory tract.

### Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2	= 2217 mg/kg ( Rat )	-	> 88.8 mg/L ( Rat ) 4 h
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> 7778-80-5	= 6600 mg/kg ( Rat )	-	-
Iron sulphate; FeSO <sub>4</sub> ·1H <sub>2</sub> O 7720-78-7	= 500 mg/kg ( Rat )	-	-
Di ammonium phosphate; (NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub> 7783-28-0	= 6500 mg/kg ( Rat )	> 7950 mg/kg ( Rabbit )	-
Manganese sulphate; MnSO <sub>4</sub> ·1H <sub>2</sub> O 7785-87-7	= 782 mg/kg ( Rat )	-	-
Ammonium sulphate; (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> 7783-20-2	= 2100 mg/kg ( Rat )	-	-
Copper sulphate anh; CuSO <sub>4</sub> 7758-98-7	= 300 mg/kg ( Rat )	= 1000 mg/kg ( Rabbit )	-
Zinc Sulfate anh; ZnSO <sub>4</sub> 7733-02-0	= 500 mg/kg ( Rat )	-	-
Sodium borate; Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> 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:**

**Sensitization:** May cause sensitization of susceptible persons  
**Mutagenic effects** No information available.  
**Carcinogenicity:** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Magnesium oxide; MgO 1309-48-4	A4	-	-	-
Sodium borate; Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> 1330-43-4	A4	-	-	-

**Reproductive Toxicity** No information available.  
**STOT - Single Exposure** No information available.  
**STOT - Repeated Exposure** May cause damage to organs through prolonged or repeated exposure.  
**Aspiration Hazard** No information available.

**Numerical Measures of Toxicity - Product Information:**

**Unknown Acute Toxicity:** 1.591% 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):** 4315 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity:**

**Ecotoxicity effects:** Harmful to aquatic organisms with long lasting effects.

**Persistence and degradability:** Not rapidly degradable.

Ingredients	LOGPOW
Ammonium Nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2	-3.1
Ammonium sulphate; (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> 7783-20-2	-5.1

**Mobility:** Water contaminating.

**Additional ecological information:** This product contains more than 0.001% Molybdenum (Mo).

**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.

<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
<b>IATA (Air)</b>	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
<b>IMO/IMDG (Vessel)</b>	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:**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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)

Ingredients	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Iron sulphate; FeSO4+1H2O 7720-78-7	-	-	-	Present
Copper sulphate anh; CuSO4 7758-98-7	-	-	-	Present
Zinc Sulfate anh; ZnSO4 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

Ingredients	CERCLA/SARA 313	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium Nitrate; NH4NO3 6484-52-2	Not listed	-	--
Iron sulphate; FeSO4+1H2O 7720-78-7	1000 lb final RQ 454 kg final RQ	-	--
Copper sulphate anh; CuSO4 7758-98-7	10 lb final RQ 4.54 kg final RQ	-	--
Zinc Sulfate anh; ZnSO4 7733-02-0	1000 lb final RQ 454 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: 2 Flammability: 0 Reactivity: 1**HMIS:** Health: 2 Flammability: 0 Reactivity: 1**Revision Date:** 28-Aug-2015**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**