



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, 3-4M
Product Number(s): G90175
Formula No.: S16364

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:

1.581% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Ammonium Nitrate; NH ₄ NO ₃	6484-52-2	20-40	*
Potassium sulphate; K ₂ SO ₄	7778-80-5	10-20	*
Iron sulphate; FeSO ₄ +1H ₂ O	7720-78-7	5-15	*
Di ammonium phosphate; (NH ₄) ₂ HPO ₄	7783-28-0	1-5	*
Iron-(III)-Sulfate (U.S.)	10028-22-5	1-5	*
Coating	PROPRIETARY	1-5	*
Manganese sulphate; MnSO ₄ +1H ₂ O	7785-87-7	1-5	*
Magnesium oxide; MgO	1309-48-4	1-5	*
Ammonium sulphate; (NH ₄) ₂ SO ₄	7783-20-2	<1	*
Copper sulphate anh; CuSO ₄	7758-98-7	<1	*
Zinc Sulfate anh; ZnSO ₄	7733-02-0	<1	*
Inert Ingredients	PROPRIETARY	<1	*
Sodium borate; Na ₂ B ₄ 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.**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 ₄ NO ₃	6484-52-2	N.A.	N.A.	Not Listed
Potassium sulphate; K ₂ SO ₄	7778-80-5	Not Listed	Not Listed	Not Listed

Iron sulphate; FeSO4+1H2O	7720-78-7	1 mg/m ³ TWA	Not Listed	Not Listed
Di ammonium phosphate; (NH4)2HPO4	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; MnSO4+1H2O	7785-87-7	0.1 mg/m ³ TWA	Not Listed	500 mg/m ³ IDLH Mn
Magnesium oxide; MgO	1309-48-4	10 mg/m ³ TWA	15 mg/m ³ TWA	750 mg/m ³ IDLH
Ammonium sulphate; (NH4)2SO4	7783-20-2	Not Listed	Not Listed	Not Listed
Copper sulphate anh; CuSO4	7758-98-7	1 mg/m ³ TWA	Not Listed	100 mg/m ³ IDLH Cu
Zinc Sulfate anh; ZnSO4	7733-02-0	Not Listed	Not Listed	Not Listed
Inert Ingredients	PROPRIETARY	Not Listed	Not Listed	Not Listed
Sodium borate; Na2B4O7	1330-43-4	2 mg/m ³ 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 sheilds, 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:**

Physical State:	Solid	Appearance:	granulate
Color:	Blend	Odor	No information available
Odor:	Fertilizer	Threshold:	

<u>Property</u>	<u>Values</u>
pH:	No information available
Melting Point/Freezing Point:	No information available
Boiling Point/Range:	No information available
Flash Point:	No information available
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
Vapor Density:	No information available
Specific Gravity:	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

Remarks: • Method

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: 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 ₄ NO ₃ 6484-52-2	= 2217 mg/kg (Rat)	-	> 88.8 mg/L (Rat) 4 h
Potassium sulphate; K ₂ SO ₄ 7778-80-5	= 6600 mg/kg (Rat)	-	-
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7	= 500 mg/kg (Rat)	-	-
Di ammonium phosphate; (NH ₄) ₂ HPO ₄ 7783-28-0	= 6500 mg/kg (Rat)	> 7950 mg/kg (Rabbit)	-
Manganese sulphate; MnSO ₄ +1H ₂ O 7785-87-7	= 782 mg/kg (Rat)	-	-
Ammonium sulphate; (NH ₄) ₂ SO ₄ 7783-20-2	= 2100 mg/kg (Rat)	-	-
Copper sulphate anh; CuSO ₄ 7758-98-7	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	-
Zinc Sulfate anh; ZnSO ₄ 7733-02-0	= 500 mg/kg (Rat)	-	-
Sodium borate; Na ₂ B ₄ O ₇ 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 ₂ B ₄ O ₇ 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: 1.581% 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): 4269 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 ₄ NO ₃ 6484-52-2	-3.1
Ammonium sulphate; (NH ₄) ₂ SO ₄ 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.

DOT (Land)	Not DOT regulated
DOT (AIR)	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
DOT (Vessel)	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
IATA (Air)	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
IMO/MDG (Vessel)	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:

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)

Ingredients	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7	-	-	-	Present
Copper sulphate anh; CuSO ₄ 7758-98-7	-	-	-	Present
Zinc Sulfate anh; ZnSO ₄ 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; NH ₄ NO ₃ 6484-52-2	Not listed	-	--
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7	1000 lb final RQ 454 kg final RQ	-	--
Copper sulphate anh; CuSO ₄ 7758-98-7	10 lb final RQ 4.54 kg final RQ	-	--
Zinc Sulfate anh; ZnSO ₄ 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
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HMIS:	Health: 2	Flammability: 0	Reactivity: 1
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Revision Date:	28-Aug-2015
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Revision Note:

Reason for revision:	None
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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