



Safety Data Sheet

Revision Date 28-May-2020

Version: 1.01

1. IDENTIFICATION

Product Identifier:

Product Name: Osmocote Blend 18-5-8; 3-4M
Product Number(s): A92173
Formula No.: S20154

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

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: Fertilizer

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

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

Unknown Acute Toxicity: 1% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight %	Trade Secret
Ammonium nitrate; NH_4NO_3	6484-52-2	30 - 40%	*
Iron sulfate monohydrate (US)	17375-41-6	5 - 10%	*
Mono ammonium phosphate; $\text{NH}_4\text{H}_2\text{PO}_4$	7722-76-1	5 - 10%	*
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$	7785-87-7	1 - 5%	*
Copper sulfate pentahydrate; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	7758-99-8	0.1 - 1%	*
Zinc sulphate mono hydrate; $\text{ZnSO}_4 \cdot \text{H}_2\text{O}$	7446-19-7	0.1 - 1%	*
Sodium borate; $\text{Na}_2\text{B}_4\text{O}_7$	1330-43-4	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:
Ammonium nitrate; NH_4NO_3 6484-52-2	-	N.A.	N.A.	-
Iron sulfate monohydrate (US) 17375-41-6	-	-	1 mg/m ³ TWA	-
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ 7785-87-7	-	-	0.1 mg/m ³ TWA	500 mg/m ³ IDLH Mn
Copper sulfate pentahydrate; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ 7758-99-8	-	-	1 mg/m ³ TWA	100 mg/m ³ IDLH Cu
Sodium borate; $\text{Na}_2\text{B}_4\text{O}_7$ 1330-43-4	-	-	2 mg/m ³ TWA	-

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

<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

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin Contact Specific test data for the substance or mixture is not available.

Ingestion 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 4,746.00

Unknown Acute Toxicity: 1% of the mixture consists of ingredient(s) of unknown toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium nitrate; NH_4NO_3 6484-52-2	= 2217 mg/kg (Rat)	> 5000 mg/kg	> 88.8 mg/L (Rat) 4 h
Mono ammonium phosphate; $\text{NH}_4\text{H}_2\text{PO}_4$ 7722-76-1	= 5750 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Manganese sulphate; $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ 7785-87-7	= 2125 mg/kg (Rat)	-	> 4.98 mg/L (Rat) 4h
Copper sulfate pentahydrate; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ 7758-99-8	= 960 mg/kg (Rat)	> 2 g/kg (Rat) > 8 g/kg (Rabbit)	-
Sodium borate; $\text{Na}_2\text{B}_4\text{O}_7$ 1330-43-4	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2 mg/m ³ (Rat) 4 h

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Sodium borate; $\text{Na}_2\text{B}_4\text{O}_7$ 1330-43-4	A4	-	-	-

Reproductive Toxicity No information available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Aspiration Hazard 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
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Copper sulfate pentahydrate; CuSO ₄ ·5H ₂ O 7758-99-8	-	0.66 - 1.15: 96 h Lepomis macrochirus mg/L LC50 semi-static 0.96 - 1.8: 96 h Lepomis macrochirus mg/L LC50 static 0.6752: 96 h Pimephales promelas mg/L LC50 static 0.09 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 static 0.1478 - 0.165: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	-	0.147 - 0.227: 48 h Daphnia magna mg/L EC50 Static
Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4	158: 96 h Desmodium subspicatus mg/L	340: 96 h Limanda limanda mg/L LC50	-	1085 - 1402: 48 h Daphnia magna mg/L LC50

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Chemical Name	LOGPOW
Ammonium nitrate; NH ₄ NO ₃ 6484-52-2	-3.1

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).

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
Ammonium nitrate; NH_4NO_3 6484-52-2	Not listed	-
Copper sulfate pentahydrate; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ 7758-99-8	10 lb final RQ 4.54 kg final RQ	-
Zinc sulphate mono hydrate; $\text{ZnSO}_4 \cdot \text{H}_2\text{O}$ 7446-19-7	1000 lb final RQ 454 kg final RQ	-

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

NFPA: Health: 2 Flammability: 0 Reactivity: 0

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

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Reason for revision *** Indicates changes since the last revision. This version replaces all previous versions
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End of Safety Data Sheet