



Safety Data Sheet

Original Issue Date 15-Jan-2020

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Version: 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product identifier

Product Name Osmocote Blend 18-5-18; 8-9M

Other means of identification

Product ID A92178C

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Uses Advised Against None

Details of the supplier of the safety data sheet

Initial Supplier Identifier

Everris NA Inc.
P.O. Box 3310
Dublin, OH 43016

Emergency telephone number

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. HAZARDS IDENTIFICATION

Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Label Elements:

Danger

Hazard statements

Causes serious eye irritation
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

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

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Causes mild skin irritation Harmful to aquatic life Harmful to aquatic life with long lasting effects Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ammonium nitrate; NH ₄ NO ₃	6484-52-2	10 - 30%	-	-
Iron sulfate monohydrate; FeSO ₄ +1H ₂ O	17375-41-6	5 - 10%	-	-
Manganese sulphate; MnSO ₄	7785-87-7	1 - 5%	-	-
Copper sulphate+5H ₂ O; CuSO ₄ +5H ₂ O	7758-99-8	0.1 - 1%	-	-
Zinc sulphate+1H ₂ O; ZnSO ₄ +1H ₂ O	7446-19-7	0.1 - 1%	-	-
Sodium borate; Na ₂ B ₄ O ₇	1330-43-4	0.1 - 1%	-	-

4. FIRST AID MEASURES

Description of first aid measures

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
Consult a physician.

Skin contact Wash skin with soap and water.
Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms no data available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Thermal decomposition can lead to release of toxic and corrosive gases/vapors.

Specific methods:
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging materials Paperbags or Bulk.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Iron sulfate monohydrate; FeSO ₄ +1H ₂ O - 17375-41-6
Alberta	TWA: 1 mg/m ³
British Columbia	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Ontario	TWA: 1 mg/m ³
Quebec	TWA: 1.0 mg/m ³
Chemical name	Manganese sulphate; MnSO ₄ - 7785-87-7
Alberta	TWA: 0.2 mg/m ³
British Columbia	TWA: 0.2 mg/m ³ TWA: 0.02 mg/m ³ Adverse reproductive effect
Ontario	TWA: 0.02 mg/m ³ TWA: 0.1 mg/m ³
Quebec	TWA: 0.2 mg/m ³
Chemical name	Sodium borate; Na ₂ B ₄ O ₇ - 1330-43-4
Alberta	TWA: 1 mg/m ³ STEL: 3 ppm
British Columbia	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Ontario	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Quebec	TWA: 2 mg/m ³ STEL: 6 mg/m ³

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas. Eyewash.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

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

Information on basic physical and chemical properties

Physical state Solid

Appearance: Granules
Color: Multi-colored
Odor: Fertilizer

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH:	No data available	no data available
Melting Point/Freezing Point:	No data available	no data available
Boiling Point/Range:	No data available	no data available
Flash Point:	No data available	no data available
Evaporation Rate:	no data available	no data available
Flammability (solid, gas):	No data available	no data available
Flammability Limits in Air:		no data available
Upper Flammability Limit:	No data available	
Lower Flammability Limit:	No data available	
Vapor Pressure:	No data available	no data available
Vapour density	No data available	no data available
Relative density		no data available
Water Solubility:	no data available	no data available
Solubility in other Solvents:	no data available	no data available
Partition Coefficient:	no data available	no data available
Autoignition Temperature:	No data available	no data available
Hyphen	no data available	no data available
Kinematic Viscosity:	No data available	no data available
Dynamic Viscosity:	no data available	no data available
Explosive properties	no data available.	
Oxidizing properties	no data available.	

Other information

Softening Point: no data available
Molecular Weight: no data available
VOC content: No data available
Density: no data available
Bulk Density: no data available

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: None under normal processing.
Conditions to Avoid: None known based on information supplied.
Incompatible materials: None known based on information supplied.
Hazardous decomposition products: None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms no data available.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral)	5,153.00 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	99,999.00 mg/l
ATEmix (inhalation-vapor)	99,999.00 mg/l

Unknown acute toxicity no data available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium nitrate; NH ₄ NO ₃ - 6484-52-2	= 2217 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 88.8 mg/L (Rat) 4 h
Manganese sulphate; MnSO ₄ - 7785-87-7	= 782 mg/kg (Rat)	-	> 4.45 mg/L (Rat) 4 h
Copper sulphate+5H ₂ O; CuSO ₄ +5H ₂ O - 7758-99-8	= 960 mg/kg (Rat)	> 8 g/kg (Rabbit)	-
Sodium borate; Na ₂ B ₄ 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 data available.

Serious eye damage/eye irritation no data available.

Respiratory or skin sensitization no data available.

Germ cell mutagenicity no data available.

Carcinogenicity no data available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Ammonium nitrate; NH ₄ NO ₃ - 6484-52-2
ACGIH	-
IARC	Group 2A
NTP	-
OSHA	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity no data available.

STOT - single exposure no data available.
STOT - repeated exposure no data available.
Aspiration hazard no data available.

12. ECOLOGICAL INFORMATION

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Copper sulphate+5H ₂ O; CuSO ₄ +5H ₂ O - 7758-99-8	-	LC50: 0.66 - 1.15mg/L (96h, Lepomis macrochirus) LC50: 0.96 - 1.8mg/L (96h, Lepomis macrochirus) LC50: 0.1478 - 0.165mg/L (96h, Oncorhynchus mykiss) LC50: 0.09 - 0.19mg/L (96h, Oncorhynchus mykiss) LC50: =0.6752mg/L (96h, Pimephales promelas)	-	EC50: 0.147 - 0.227mg/L (48h, Daphnia magna)
Sodium borate; Na ₂ B ₄ O ₇ - 1330-43-4	EC50: =158mg/L (96h, Desmodesmus subspicatus) EC50: 2.6 - 21.8mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =340mg/L (96h, Limanda limanda)	-	LC50: 1085 - 1402mg/L (48h, Daphnia magna)

Persistence and Degradability: no data available.
Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
Ammonium nitrate; NH ₄ NO ₃ - 6484-52-2	-3.1
Sodium borate; Na ₂ B ₄ O ₇ - 1330-43-4	-1.53

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14. TRANSPORT INFORMATION

<u>TDG</u>	Not regulated
<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer
Not applied

The Stockholm Convention on Persistent Organic Pollutants
Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA:</u>	Health hazards 2	Flammability 0	Instability 0	Physical and chemical properties -
<u>HMIS Health Rating:</u>	Health hazards 2 *	Flammability 0	Physical hazards 0	Personal protection X

Prepared by Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM).

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

Disclaimer

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