

Safety Data Sheet

Issue Date: no data available

Revision Date: 19-May-2017

Version: 2.01

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

Product Identifier:

Product Name: Osmocote Blend Controlled Release Fertilizer with Micronutrients 22-5-6 (4-5M)

Other Means of Identification:

Product ID: A90174C

Synonyms: None

Recommended Use of the Chemical and Restrictions on Use:

Recommended Use: Controlled Release Fertilizer

Uses Advised Against: No information available

Details of the Supplier of the Safety Data Sheet:

Initial Supplier Identifier

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

Emergency Telephone Numbers:

Emergency Telephone CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-800-492-8255

2. HAZARDS IDENTIFICATION

Classification 67/548/EEC

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements:

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Other Information:

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Sulphur; S 7704-34-9	7704-34-9	5-10	-	-
Iron Oxide; Fe ₂ O ₃ 1309-37-1	1309-37-1	1-5	-	-
Zinc Sulfate anh; ZnSO ₄ 7733-02-0	7733-02-0	<1	-	-
Zinc oxide; ZnO 1314-13-2	1314-13-2	<1	-	-

4. FIRST AID MEASURES

First Aid Measures:

Inhalation	Remove to fresh air.
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 (Acute and Chronic):

Symptoms	No information 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	No information available.
Specific hazards arising from the chemical	No information available.
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 Cleanup:

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.

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.

Appropriate Engineering Controls:

Engineering controls Showers
Eyewash stations
Ventilation systems.

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

Physical and Chemical Properties:

Physical State:	Solid
Appearance:	Granules
Color:	Multi-colored
Odor:	Fertilizer
Odor Threshold:	No information available

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

Acute Toxicity

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

ATEmix (oral) 15,169.00 mg/kg

ATEmix (dermal) 17,356.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulphur; S - 7704-34-9	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat) 4 h
Iron Oxide; Fe ₂ O ₃ - 1309-37-1	> 10000 mg/kg (Rat)	Ne	Ne
Zinc Sulfate anh; ZnSO ₄ - 7733-02-0	= 1710 mg/kg (Rat)	Ne	Ne
Zinc oxide; ZnO - 1314-13-2	> 5000 mg/kg (Rat)	Ne	Ne

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.

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

Chemical Name	Iron Oxide; Fe ₂ O ₃ - 1309-37-1
ACGIH - Carcinogens	A4
IARC:	3
NTP Report on Carcinogens List -	-
OSHA	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

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

Ecotoxicity

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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Sulphur; S - 7704-34-9	-	866: 96 h Brachydanio rerio mg/L LC50 static 14: 96 h Lepomis macrochirus mg/L LC50 static 180: 96 h Oncorhynchus mykiss mg/L LC50 static	-	-
Zinc Sulfate anh; ZnSO ₄ - 7733-02-0	0.056: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 64.8: 72 h Chlorella vulgaris mg/L EC50 2.4: 96 h Chlorella vulgaris mg/L EC50	0.162: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.05: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.34 - 0.93: 96 h Oncorhynchus mykiss mg/L LC50 static 0.218 - 0.42: 96 h Pimephales promelas mg/L LC50 flow-through 0.06: 96 h Pimephales promelas mg/L LC50 static 0.23 - 0.48: 96 h Pimephales promelas mg/L LC50 49.23 - 64.16: 96 h Poecilia reticulata mg/L LC50 semi-static 0.48 - 1.72: 96 h Poecilia reticulata 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 3.55 - 6.32: 96 h Lepomis macrochirus mg/L LC50 static 0.63: 96 h Poecilia reticulata mg/L LC50	-	0.75: 48 h Daphnia magna mg/L EC50 0.538 - 0.908: 48 h Daphnia magna mg/L EC50 Static

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Mobility: Slightly soluble in water.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Waste from residues/unused
products
Contaminated packaging

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT: Not regulated

IATA Not regulated

IMO / IMDG Not regulated

15. REGULATORY INFORMATION

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

International Regulations

Ozone-depleting substances (ODS) Not Applicable

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)	Ceiling	Maximum limit value
*	Skin designation				

Revision Date: 19-May-2017

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

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.