



Safety Data Sheet

Issue Date: no data available

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Version: 1

1. IDENTIFICATION

Product Identifier:

Product Name: Osmocote® Blend 19-5-9; 12-14M
Product Number(s): A901326
Formula No.: S11796

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

Classification 67/548/EEC

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label Elements:

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance: No information available

Physical State: Solid

Odor: No information available

Hazards Not Otherwise Classified (HNOC):

Not Applicable

Other Information:

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS-No | Weight % | Trade Secret |
|---|-------------|----------|--------------|
| Ammonium Nitrate; NH ₄ NO ₃ | 6484-52-2 | 30-40 | * |
| Potassium sulphate; K ₂ SO ₄ | 7778-80-5 | 10-30 | * |
| Di ammonium phosphate; (NH ₄) ₂ HPO ₄ | 7783-28-0 | 5-10 | * |
| Coating | PROPRIETARY | 5-10 | * |
| Sulphur; S | 7704-34-9 | 1-5 | * |
| Iron Oxide; Fe ₂ O ₃ | 1309-37-1 | 1-3 | * |

| | | | |
|---|-----------|----|---|
| Iron sulphate; FeSO ₄ +1H ₂ O | 7720-78-7 | <1 | * |
| Zinc Sulfate anh; ZnSO ₄ | 7733-02-0 | <1 | * |
| Zinc oxide; ZnO | 1314-13-2 | <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.

Hazardous Combustion Products: Combustion can produce toxic fumes and irritating gases.

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 contact with skin. Keep out of reach of children and pets.

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.

| Ingredients | ACGIH TLV | OSHA: | IDLH: |
|---|-----------|---|--------------------------------|
| Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 | - | N.A. | - |
| Potassium sulphate; K ₂ SO ₄ 7778-80-5 | - | Not Listed | - |
| Iron Oxide; Fe ₂ O ₃ 1309-37-1 | - | 10 mg/m ³ TWA 15 mg/m ³ TWA Rouge 5 mg/m ³ TWA Rouge | 2500 mg/m ³ IDLH Fe |
| Zinc oxide; ZnO 1314-13-2 | - | 5 mg/m ³ TWA 15 mg/m ³ TWA | 500 mg/m ³ IDLH |

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: | granulate |
| Color: | Multi-colored | Odor | No information available |
| Odor: | oily | Threshold: | |

| <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: | 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 |
| 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: | 55-65 lbs/cu.ft. |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| <u>Reactivity:</u> | Stable under normal conditions |
| <u>Chemically Stable:</u> | yes. |
| <u>Conditions to Avoid:</u> | Damp or wet conditions. Extreme heat. |
| <u>Materials to avoid</u> | Oxidizing agent. |
| <u>Hazardous Decomposition Products:</u> | Toxic fumes and gases may be generated. Metal oxides possible. |
| <u>Possibility of Hazardous Reactions:</u> | Poses little or no immediate hazard. |

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: . mg/kg

Unknown Acute Toxicity: No information available

| 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) | - | - |
| Di ammonium phosphate; (NH ₄) ₂ HPO ₄ 7783-28-0 | = 6500 mg/kg (Rat) | > 7950 mg/kg (Rabbit) | - |
| 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) | - | - |
| Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7 | = 500 mg/kg (Rat) | - | - |
| Zinc Sulfate anh; ZnSO ₄ 7733-02-0 | = 1710 mg/kg (Rat) | - | - |
| Zinc oxide; ZnO 1314-13-2 | > 5000 mg/kg (Rat) | - | - |

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.

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

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.

| Ingredients | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|-------------------|----------------------|------------------------|----------------------------|-----------|
| Ammonium Nitrate; | - | 65 - 85: 48 h Cyprinus | - | - |

| | | | | |
|---|---|---|---|--|
| NH ₄ NO ₃ 6484-52-2 | | carpio mg/L LC50 semi-static | | |
| Potassium sulphate; K ₂ SO ₄ 7778-80-5 | 2900: 72 h Desmodesmus subspicatus mg/L EC50 | 653: 96 h Lepomis macrochirus mg/L LC50 3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas mg/L LC50 static | - | 890: 48 h Daphnia magna mg/L EC50 |
| Di ammonium phosphate; (NH ₄) ₂ HPO ₄ 7783-28-0 | - | 26.5: 96 h Oncorhynchus mykiss mg/L LC50 24.8 - 29.4: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 3.3: 96 h Pimephales promelas mg/L LC50 33: 96 h Pimephales promelas mg/L LC50 static | - | - |
| 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 | - | - |
| Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7 | - | 925: 96 h Poecilia reticulata mg/L LC50 static 0.56: 96 h Cyprinus carpio mg/L LC50 semi-static | - | 152: 48 h Daphnia magna mg/L EC50 6.15 - 9.26: 48 h Daphnia magna mg/L EC50 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 | - | 0.75: 48 h Daphnia magna mg/L EC50 0.538 - 0.908: 48 h Daphnia magna mg/L EC50 Static |

| | | | | |
|--|--|--|--|--|
| | | flow-through 3.55 - 6.32: 96 h Lepomis macrochirus mg/L LC50 static 0.63: 96 h Poecilia reticulata mg/L LC50 | | |
|--|--|--|--|--|

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

| Ingredients | LOGPOW |
|--|--------|
| Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 | -3.1 |

Mobility: Slightly water contaminating.

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/IMDG (Vessel) UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII

15. REGULATORY INFORMATION

International Inventories:

TSCA This product does not comply with USINV
DSL/NDSL DSL/NDSL
EINECS/ELINCS EINECS/ELINCS
ENCS This product does not comply with encs:
CHINA This product does not comply with china:
KOREA KOREA
PICCS PICCS
Australian Inventory of Chemical Substances This product does not comply with AICS

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

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 contains the following substances which are regulated 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 |
| Zinc Sulfate anh; ZnSO ₄ 7733-02-0 | - | - | - | Present |

CERCLA:

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Ingredients | CERCLA/SARA 313 | CERCLA/SARA 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 | - |
| Zinc Sulfate anh; ZnSO ₄ 7733-02-0 | 1000 lb final RQ 454 kg final RQ | - |

State Regulations (RTK):

California Proposition 65:

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations:

U.S. EPA Label information:

EPA Pesticide Registration Number: Not Applicable

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

NFPA: Health: 1 Flammability: 0 Reactivity: 1

HMIS: Health: 1 Flammability: 0 Reactivity: 1

Revision Date: 12-Aug-2016

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