Safety Data Sheet



Issue Date: no data available Revision Date: 22-Aug-2016 Version: 1

1. IDENTIFICATION

Product Identifier:

Product Name: Osmocote® Plus 15-9-12; 3-4M

Product Number(s): A903206 Formula No.: S12716

Recommended Use of the Chemical and Restrictions on Use:

Description:

Controlled Release Fertilizer

Company: 24-HOUR EMERGENCY TELEPHONE NUMBERS:

 Everris NA Inc.
 CHEMTREC (U.S.): 1-800-424-9300

 P.O. Box 3310
 CHEMTREC (International): 1-703-527-3887

 Dublin, OH 43016
 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 Physical State: Solid Odor: No information available

available

Hazards Not Otherwise Classified (HNOC):

Not Applicable

Other Information:

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

Unknown Acute Toxicity: 1.446% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS-No | Weight % | Trade Secret |
|----------------------------------------------------|-------------|----------|--------------|
| Ammonium Nitrate; NH4NO3 | 6484-52-2 | 40-60 | * |
| Potassium sulphate; K ₂ SO ₄ | 7778-80-5 | 20-30 | * |
| Coating | PROPRIETARY | 5-10 | * |
| Iron (III) Phosphate | 10045-86-0 | 1-3 | * |
| Copper sulphate anh; CuSO ₄ | 7758-98-7 | <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

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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, preferabley 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 be 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

<u>Suitable extinguishing media:</u> Water spray, carbon dioxide, dry chemical, chemical foam.

<u>Unsuitable extinguishing media:</u> 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:

Methods for Cleanup:

Use good housekeeping practices. Clean up promptly by sweeping or vacuum. If material is uncontaminated, collect and reuse as recommended for product.

7. HANDLING AND STORAGE

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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.

| Ingredients | ACGIH TLV | OSHA: | IDLH: |
|----------------------------------------------------|-----------|------------|-------------------------------|
| Ammonium Nitrate; NH4NO3 | - | N.A. | - |
| 6484-52-2 | | | |
| Potassium sulphate; K ₂ SO ₄ | - | Not Listed | - |
| 7778-80-5 | | | |
| Copper sulphate anh; CuSO ₄ | - | - | 100 mg/m ³ IDLH Cu |
| 7758-98-7 | | | - |

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 protectionNo 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 Color: Tan, brown

Color: Tan, brown Appearance: granulate

Odor: Fertilizer Odor No information available

Threshold:

Remarks: • Method

<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

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Lower Flammability Limit: No information available **Vapor Pressure:** No information available No information available Vapor Density: No information available **Specific Gravity:** Solubility: No information available Solubility in other Solvents: No information available **Partition Coefficient:** No information available No information available **Autoignition Temperature: 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:

Molecular Weight:

VOC Content (%):

Density:

No information available
No information available
No information available
No information available

Bulk density: 50-70 lbs/cu.ft.

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions

<u>Chemically Stable:</u> yes.

Conditions to Avoid: Damp or wet conditions. Extreme heat.

<u>Materials to avoid</u> Oxidizing agent.

Hazardous Decomposition

Products:

Toxic fumes and gases may be generated. Metal oxides possible.

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):

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: .

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 Oral LD50
 37,631.00 mg/kg

 Dermal LD50
 52,015.31 mg/kg

Unknown Acute Toxicity: 1.446% of the mixture consists of ingredient(s) of unknown toxicity

| Ingredients | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------------------------------------------------------|--------------------|----------------------|-----------------------|
| Ammonium Nitrate; NH₄NO₃ 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) | - | • |
| Copper sulphate anh; CuSO ₄ 7758-98-7 | = 300 mg/kg (Rat) | = 1000 mg/kg(Rabbit) | - |
| Sodium borate; Na ₂ B ₄ O ₇ 1330-43-4 | = 2660 mg/kg (Rat) | > 2000 mg/kg(Rabbit) | - |

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

skin corrosion/irritationNo 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 |
|---------------------------------------------------------------------------|---------------------|-------|-------------------------------------|------|
| 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 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; NH4NO ₃ 6484-52-2 | - | 65 - 85: 48 h Cyprinus 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 |
| Copper sulphate anh; CuSO ₄ 7758-98-7 | - | 0.1: 96 h Oncorhynchus mykiss mg/L LC50 | _ | 0.024: 48 h Daphnia magna mg/L EC50 |
| Sodium borate; Na ₂ B ₄ O ₇ | 158: 96 h Desmodesmus | 340: 96 h Limanda | - | 1085 - 1402: 48 h |

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| 1330-43-4 | subspicatus mg/L | limanda mg/L LC50 | Daphnia magna mg/L |
|-----------|------------------|-------------------|--------------------|
| | | | LC50 |

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

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

Mobility: 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

15. REGULATORY INFORMATION

Federal Regulations:

<u>SARA 313:</u>

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 | CWA - Toxic Pollutants | Clean Water Act - Priority | Clean Water Act - |
|-------------------------------------------|------------------|------------------------|----------------------------|----------------------|
| | Quantities | | Pollutants | Hazardous Substances |
| Copper sulphate anh; CuSO ₄ | - | - | - | Present |
| 7758-98-7 | | | | |

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; NH₄NO₃ 6484-52-2 | Not listed | - |
| Copper sulphate anh; CuSO ₄ | 10 lb final RQ | - |
| 7758-98-7 | 4.54 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:1Flammability:0Reactivity:1HMIS:Health:1Flammability:0Reactivity:1

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Revision Note:

Reason for revision: None

Disclaimer

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End of Safety Data Sheet