Safety Data Sheet



Issue Date: no data available Revision Date: 25-Aug-2016 Version: 1

1. IDENTIFICATION

Product Identifier:

Product Name: Osmocote® Plus 15-8-11; 8-9M

Product Number(s): A90336 Formula No.: S12785

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 informationPhysical State:SolidOdor: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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Ammonium Nitrate; NH4NO3	6484-52-2	30-60	*
Potassium sulphate; K ₂ SO ₄	7778-80-5	20-30	*
Coating	PROPRIETARY	5-10	*
Di ammonium phosphate; (NH ₄) ₂ HPO ₄	7783-28-0	1-3	*
Ammonium sulphate; (NH ₄) ₂ SO ₄	7783-20-2	1-3	*
Iron sulphate; FeSO₄+1H₂O	7720-78-7	<1	*

, o...

Copper sulphate anh; CuSO ₄	7758-98-7	<1	*
Borax; Na ₂ B ₄ O ₇ +10H ₂ O	1303-96-4	<1	*
Sodium molybdate; Na ₂ MoO ₄ +2H ₂ O	7631-95-0	<0.1	*

^{*} 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

Revision Date: 25-Aug-2016

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

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.

Revision Date: 25-Aug-2016

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.

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	-
Copper sulphate anh; CuSO ₄ 7758-98-7	-	-	100 mg/m³ IDLH Cu
Sodium molybdate; Na ₂ MoO ₄ +2H ₂ O 7631-95-0	-	5 mg/m³ TWA	1000 mg/m³ IDLH Mo

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 Appearance: granulate

Odor: Fertilizer **Odor** No information available

Threshold:

<u>Property</u> <u>Values</u> <u>Remarks: • Method</u>

pH: No information availableMelting Point/Freezing Point: No information available

A90336 Osmocote® Plus 15-8-11; 8-9M

Revision Date: 25-Aug-2016

Boiling Point/Range:

Flash Point:

Evaporation Rate:

Flammability (solid, gas):

No information available
No information available
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

Other Information:

Explosive Properties:

Oxidizing Properties:

Softening Point:No information availableMolecular Weight:No information availableVOC Content (%):No information availableDensity:No information available

Bulk density: 55-65 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):

No information available

Not considered an oxidizer

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: .

 Oral LD50
 54,320.00 mg/kg

 Dermal LD50
 93,947.28 mg/kg

Unknown Acute Toxicity: No information available

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)	-	-
Di ammonium phosphate; (NH ₄) ₂ HPO ₄ 7783-28-0	= 6500 mg/kg (Rat)	> 7950 mg/kg (Rabbit)	-
Ammonium sulphate; (NH ₄) ₂ SO ₄ 7783-20-2	= 2100 mg/kg (Rat)	-	-
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7	= 500 mg/kg (Rat)	-	-
Copper sulphate anh; CuSO ₄ 7758-98-7	= 300 mg/kg (Rat)	= 1000 mg/kg(Rabbit)	-
Borax; Na ₂ B ₄ O ₇ +10H ₂ O 1303-96-4	= 3493 mg/kg (Rat) = 2660 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-
Sodium molybdate; Na ₂ MoO ₄ +2H ₂ O 7631-95-0	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m³(Rat)4 h

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

skin corrosion/irritationNo information available.Serious eye damage/eye irritationNo information available.Respiratory or skin sensitizationNo information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Borax; Na ₂ B ₄ O ₇ +10H ₂ O 1303-96-4	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	Crustacea
----------------------------------	------	-------------	-----------

Revision Date: 25-Aug-2016

			Microorganisms	
Ammonium Nitrate;	-	65 - 85: 48 h Cyprinus	-	-
NH₄NO₃		carpio mg/L LC50		
6484-52-2		semi-static		
Potassium sulphate;	2900: 72 h	653: 96 h Lepomis	-	890: 48 h Daphnia
K ₂ SO ₄	Desmodesmus	macrochirus mg/L LC50		magna mg/L EC50
7778-80-5	subspicatus mg/L EC50	3550: 96 h Lepomis		
		macrochirus mg/L LC50		
		static 510 - 880: 96 h		
		Pimephales promelas		
		mg/L LC50 static		
Di ammonium phosphate;	-	26.5: 96 h Oncorhynchus	-	-
(NH ₄) ₂ HPO ₄		mykiss mg/L LC50 24.8 -		
7783-28-0		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		
Ammonium sulphate;	-	460 - 1000: 96 h	-	14: 48 h Daphnia magna
(NH ₄) ₂ SO ₄		Leuciscus idus mg/L		mg/L LC50 423: 24 h
7783-20-2				Daphnia magna mg/L
				EC50
Iron sulphate;	-	925: 96 h Poecilia	-	152: 48 h Daphnia
FeSO ₄ +1H ₂ O		reticulata mg/L LC50		magna mg/L EC50 6.15 -
7720-78-7		static 0.56: 96 h Cyprinus		9.26: 48 h Daphnia
		carpio mg/L LC50		magna mg/L EC50 Static
		semi-static		
Copper sulphate anh;	-	0.1: 96 h Oncorhynchus	-	0.024: 48 h Daphnia
CuSO ₄		mykiss mg/L LC50		magna mg/L EC50
7758-98-7				

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Ingredients	LOGPOW
Ammonium Nitrate; NH ₄ NO ₃	-3.1
6484-52-2	
Ammonium sulphate; (NH ₄) ₂ SO ₄	-5.1
7783-20-2	

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

Revision Date: 25-Aug-2016

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

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 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
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7	-	-	-	Present
Copper sulphate anh; CuSO ₄ 7758-98-7	-	-	-	Present

<u>CERCLA:</u>

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	Not listed	-
6484-52-2		
Iron sulphate; FeSO ₄ +1H ₂ O	1000 lb final RQ	-
7720-78-7	454 kg final RQ	
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:

8-9M

Revision Date: 25-Aug-2016

U.S. EPA Label information:

EPA Pesticide Registration Number: Not Applicable

16. OTHER INFORMATION

NFPA: Health: 1 Flammability: 1 Reactivity: 1

HMIS: Health: 1 Flammability: 1 Reactivity: 1

Revision Date: 25-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