



Issue Date: no data available

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Version: 1

1. IDENTIFICATION

Product Identifier: Product Name: Product Number(s): Formula No.:

Osmocote® Blend 19-6-9; 5-6M A99400 S16441

Recommended Use of the Chemical and Restrictions on Use: 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

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: Granules

Physical State: Solid

Odor: Fertilizer

Hazards Not Otherwise Classified (HNOC):

Not Applicable

Other Information:

Causes mild skin irritation Very toxic to aquatic life with long lasting effects Very toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Ammonium Nitrate; NH4NO3	6484-52-2	20-30	*
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	1-5	*
Sulphur; S	7704-34-9	1-5	*
Iron-(III)-Sulfate (U.S.)	10028-22-5	1-5	*
Copper sulfate pentahydrate; CuSO4+5H2O	7758-99-8	<1	*
Zinc sulphate mono hydrate; ZnSO4+1H2O	7446-19-7	<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, 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 Medica	I Attention and Special Treatment Needed:		
Notes to Physician:	Treat symptomatically.		
	5. FIRE-FIGHTING MEASURES		
Unsuitable extinguishing media:	High volume water jet.		
Specific hazards:	No information available.		
Explosion Data:			
Sensitivity to Mechanical Impac no data available. Sensitivity to Static Discharge: no data available.	t:		
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 Ed	quipment and Emergency Procedures:		
Personal Precautions:	Wear personal protective equipment.		
Methods and Material for Containment and Cleanup:			
Methods for containment: Methods for Cleanup:	Control spill with dykes and absorb with inert absorbant material. Pick up and transfer to properly labelled containers.		
7. HANDLING AND STORAGE			
Precautions for Safe Handling:			
Handling: Avoid container breakage.			
Conditions for Safe Storage, Includ	ing any Incompatibilities:		
Storage: Keep containers tightly clos	ed in a dry, cool and well-ventilated place.		
8. EX	POSURE 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			
Copper sulfate pentahydrate;	-	-	100 mg/m ³ IDLH Cu
CuSO ₄ +5H ₂ O			-
7758-99-8			

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:

Property pH:Values No information availableRemarks: • MethodMelting Point/Freezing Point:No information availableBoiling Point/Range:No information availableFlash Point:No information availableEvaporation Rate:No information availableFlammability (solid, gas):No information available	Physical State: Odor:	Solid Fertilizer	Odor Threshold:	No information available
Flammability Limits in Air:Upper Flammability Limit:No information availableLower Flammability Limit:No information availableVapor Pressure:No information availableVapor Density:No information availableSpecific Gravity:No information availableSolubility:No information availableSolubility:No information availablePartition Coefficient:No information availableAutoignition Temperature:No information availableKinematic Viscosity:No information availableKinematic Viscosity:No information availableDynamic Viscosity:No information availableNo information availableNo information availableKinematic Viscosity:No information availableDynamic Viscosity:No information availableNo information availableNo information availableKinematic Viscosity:No information availableDynamic Viscosity:No information availableKinematic Properties:No information availableNo information availableNo information availableKinematic Niscosity:No information availableNo information avai	pH: Melting Point/Freezing Point: Boiling Point/Range: Flash Point: Evaporation Rate: Flammability (solid, gas): Flammability Limits in Air: Upper Flammability Limit: Lower Flammability Limit: Vapor Pressure: Vapor Density: Specific Gravity: Solubility: Solubility in other Solvents: Partition Coefficient: Autoignition Temperature: Decomposition Temperature: Kinematic Viscosity: Dynamic Viscosity: Explosive Properties:	No information available No information available	<u>Remarks: • I</u>	<u>Method</u>

Other Information:

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:

Stable under normal conditions

Chemically Stable:	yes.
Conditions to Avoid:	Extreme heat.
Materials to avoid	Nitrogen oxides (NOx).
Hazardous Decomposition Products:	No information available.

Possibility of Hazardous Reactions: None under normal processing.

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: . Oral LD50 7,103.00 mg/kg

	7,105.00 mg/kg
Dermal LD50	89,447.86 mg/kg

Unknown Acute Toxicity:

No information available

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH₄NO ₃ 6484-52-2	= 2217 mg/kg (Rat)	-	> 88.8 mg/L (Rat)4 h
Sulphur; S 7704-34-9	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat)4 h
Iron-(III)-Sulfate (U.S.) 10028-22-5	= 500 mg/kg(Rat)	-	-
Copper sulfate pentahydrate; CuSO4+5H2O	= 960 mg/kg (Rat)= 300 mg/kg (Rat)	> 2 g/kg (Rat)	-

7758-99-8		

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.
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; NH4NO3 6484-52-2	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-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-(III)-Sulfate (U.S.) 10028-22-5	-	37.2: 96 h Gambusia affinis mg/L LC50 static	-	-
Copper sulfate pentahydrate; CuSO₄+5H₂O 7758-99-8	-	0.66 - 1.15: 96 h Lepomis macrochirus mg/L LC50 semi-static 0.96 - 1.8: 96 h Lepomis macrochirus mg/L LC50 static 0.1478 - 0.165: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.09 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 static 0.6752: 96 h Pimephales promelas mg/L LC50 static	-	0.147 - 0.227: 48 h Daphnia magna mg/L EC50 Static

Persistence and Degradability:

No information available.

Bioaccumulation:

No information available.

Ingredients	

LOGPOW

Ammonium Nitrate; NH4NO3	-3.1
6484-52-2	

Mobility:

No information available.

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 regulated
DOT (AIR)	Not regulated
DOT (Vessel)	Not regulated
IATA (Air)	Not regulated
IMO/IMDG (Vessel)	Not regulated

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 does not contain any substances regulated as 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-(III)-Sulfate (U.S.) 10028-22-5	-	-	-	Present

CERCLA:

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and

Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Ingredients	CERCLA/SARA 313	CERCLA/SARA RQ
Ammonium Nitrate; NH4NO3	Not listed	-
6484-52-2		
Iron-(III)-Sulfate (U.S.)	1000 lb final RQ	-
10028-22-5	454 kg final RQ	
Copper sulfate pentahydrate; CuSO ₄ +5H ₂ O	10 lb final RQ	-
7758-99-8	4.54 kg final RQ	
Zinc sulphate mono hydrate; ZnSO ₄ +1H ₂ O	1000 lb final RQ	-
7446-19-7	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: 2	Flammability: 0	Reactivity: 0
HMIS:	Health:	Flammability:	Reactivity:
Revision Revision		26-Oct-2016	
	or revision:	None	
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End of Safety Data Sheet