Safety Data Sheet

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1. IDENTIFICATION

Product Identifier
Product Name 19-0-5 Solid Fertilizer

Other means of identification
SDS # CE-001

Recommended use of the chemical and restrictions on use
Recommended Use Fertilizer.

Details of the supplier of the safety data sheet
Supplier Address
Carolina Eastern Vail Inc.
4180 Rt. 29
Salem, New York 12865

Emergency Telephone Number
Company Phone Number 1-518-854-9785
Emergency Telephone (24 hr) 1-518-854-9785

2. HAZARDS IDENTIFICATION

Appearance Granular **Physical State** Solid **Odor** Characteristic

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Combustible Dust	

Signal Word
Warning

Hazard Statements
Harmful if swallowed
Causes skin irritation
May form combustible dust concentrations in air

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Consult local, state or federal regulatory agencies for acceptable disposal procedures and locations. Disposal in waterways or sewers may be prohibited

Other Hazards
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Proprietary Fertilizer Blend	Proprietary	100

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

*proprietary fertilizer blend may contain one or more of the following CAS #: 10101-41-4, 10294-66-3, 1309-48-4, 1314-13-0, 1314-13-2, 1319-33-1, 13397-24-5, 14797-55-8, 14977-37-8, 14977-37-8, 15245-12-2, 57-13-6, 584-08-7, 6484-52-2, 65996-95-4, 68333-79-9, 7439-96-5, 7440-50-8, 7447-40-7, 7704-34-9, 7722-76-1, 7732-18-5, 7757-93-9, 7778-18-9, 7783-20-0, 7783-28-0, 8001-22-7.

4. FIRST-AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms Not determined.

Indication of any immediate medical attention and special treatment needed

Notes to Physician 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 Not determined.

Specific Hazards Arising from the Chemical

Dust can form an explosive mixture with air.

Sensitivity to Static Discharge AVOID GENERATING DUST. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Vacuum or sweep up material & place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wear protective gloves/protective clothing and eye/face protection. Wash face, hands, and any exposed skin thoroughly after handling. Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Manganese 7439-96-5	TWA: 0.02 mg/m³ Mn TWA: 0.1 mg/m³ Mn	(vacated) TWA: 1 mg/m³ fume (vacated) STEL: 3 mg/m³ fume (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ Mn	IDLH: 500 mg/m³ Mn TWA: 1 mg/m³ Mn STEL: 3 mg/m³ Mn
Calcium Sulfate 7778-18-9	TWA: 10 mg/m³ inhalable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
Magnesium Oxide 1309-48-4	TWA: 10 mg/m³ inhalable fraction	TWA: 15 mg/m³ fume, total particulate (vacated) TWA: 10 mg/m³ fume and total particulate	IDLH: 750 mg/m³ fume
Zinc Oxide 1314-13-2	STEL: 10 mg/m³ respirable fraction TWA: 2 mg/m³ respirable fraction	TWA: 5 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ fume (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction (vacated) STEL: 10 mg/m³ fume	IDLH: 500 mg/m³ Ceiling: 15 mg/m³ dust TWA: 5 mg/m³ dust and fume STEL: 10 mg/m³ fume

Copper 7440-50-8	TWA: 1 mg/m³ Cu dust and mist	TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist	IDLH: 100 mg/m³ Cu dust and mist TWA: 1 mg/m³ Cu dust and mist

Appropriate engineering controls

Engineering Controls Use explosion proof electrical equipment for very high dust levels. Ensure ventilation and dust-handling systems prevent the escape of dust into work areas and there is no leakage from equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin and Body Protection Avoid skin contact. Wear chemical resistant gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards. No special body protection is required under typical circumstances of use and handling.

Respiratory Protection Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Solid		
Appearance	Granular	**Odor**	Characteristic
Color	Not determined	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	

Vapor Pressure	Not determined
Vapor Density	Not determined
Specific Gravity	Not determined
Water Solubility	Not determined
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined

Explosive Properties Not determined
Oxidizing Properties Not determined

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Causes skin irritation.

Inhalation Do not inhale.

Ingestion Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Urea 57-13-6	= 8471 mg/kg (Rat)	-	-
Manganese 7439-96-5	= 9 g/kg (Rat)	-	-
Mono-ammonium Phosphate 7722-76-1	= 5750 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Calcium Sulfate 7778-18-9	> 3000 mg/kg (Rat)	-	-
Diammonium Phosphate 7783-28-0	= 6500 mg/kg (Rat)	> 7950 mg/kg (Rabbit)	-
Zinc Oxide 1314-13-2	> 5000 mg/kg (Rat)	-	-
Potassium Chloride 7447-40-7	= 2600 mg/kg (Rat)	-	-
Sulfur 7704-34-9	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat) 4 h
Potassium Carbonate 584-08-7	= 1870 mg/kg (Rat)	-	-
Ammonium Nitrate 6484-52-2	= 2217 mg/kg (Rat)	-	> 88.8 mg/L (Rat) 4 h
Ammonium Polyphosphate 68333-79-9	= 4740 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered IARC group 2A carcinogens.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium Nitrate 6484-52-2		Group 2A		X

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Urea 57-13-6		16200 - 18300: 96 h Poecilia reticulata mg/L LC50		3910: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna Straus mg/L EC50

Calcium Sulfate 7778-18-9		2980: 96 h Lepomis macrochirus mg/L LC50 static 1970: 96 h Pimephales promelas mg/L LC50 static		3200: 120 h Nitscheria linearis mg/L EC50
Diammonium Phosphate 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		
Copper 7440-50-8	0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.3: 96 h Pimephales promelas mg/L LC50 static 0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.25: 96 h Lepomis macrochirus mg/L LC50 static 0.3: 96 h Cyprinus carpio mg/L LC50 semi-static 0.8: 96 h Cyprinus carpio mg/L LC50 static 0.112: 96 h Poecilia reticulata mg/L LC50 flow-through		0.03: 48 h Daphnia magna mg/L EC50 Static
Potassium Chloride 7447-40-7	2500: 72 h Desmodesmus subspicatus mg/L EC50	1060: 96 h Lepomis macrochirus mg/L LC50 static 750 - 1020: 96 h Pimephales promelas mg/L LC50 static		825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static
Sulfur 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		
Ammonium Nitrate 6484-52-2		65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static		
Ammonium Polyphosphate 68333-79-9		500: 96 h Brachydanio rerio mg/L LC50 static 123: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 685 - 1066: 96 h Oncorhynchus mykiss mg/L LC50 static 389 - 654: 96 h Pimephales promelas mg/L LC50 static		

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility

Chemical Name	Partition Coefficient
Urea 57-13-6	-1.59
Ammonium Nitrate 6484-52-2	-3.1

Other Adverse Effects
Not determined

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 Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Manganese 7439-96-5	Ignitable powder
Zinc Oxide 1314-13-2	Toxic
Copper 7440-50-8	Toxic
Ammonium Nitrate 6484-52-2	Ignitable Reactive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories
All ingredients are listed or exempt from listing on Chemical Substance Inventory

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Copper 7440-50-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Manganese - 7439-96-5	7439-96-5	100	1.0
Mono-ammonium Phosphate - 7722-76-1	7722-76-1	100	1.0
Diammonium Phosphate - 7783-28-0	7783-28-0	50	1.0
Zinc Oxide - 1314-13-2	1314-13-2	50	1.0
Copper - 7440-50-8	7440-50-8	50	1.0
Ammonium Nitrate - 6484-52-2	6484-52-2	50	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Oxide		X		
Copper		X	X	

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Manganese 7439-96-5	X	X	X
Calcium Sulfate 7778-18-9	X	X	X
Magnesium Oxide 1309-48-4	X	X	X
Zinc Oxide 1314-13-2	X	X	X
Copper 7440-50-8	X	X	X
Sulfur 7704-34-9	X	X	X
Ammonium Nitrate 6484-52-2	X	X	X

16. OTHER INFORMATION

Additional Product Information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

NFPA	**Health Hazards** Not determined	**Flammability** Not determined	**Instability** Not determined	**Special Hazards** Not determined
HMIS	**Health Hazards** Not determined	**Flammability** Not determined	**Physical Hazards** Not determined	**Personal Protection** Not determined

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Disclaimer

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End of Safety Data Sheet