

MATERIAL SAFETY DATA SHEET

OSMOCOTE FERTILIZER
CAROLINA BIOLOGICAL

Revised: 09/12/07
Replaces: 07/16/04
Printed: 05/20/08

1. PRODUCT DESCRIPTION

Product Name: Osmocote(R) Controlled Release Fertilizer 14-14-14
Product Code(s): 97-1929, C10957, 15-8702, 15-8730
Size: N/A
Chemical Name: Does not apply. Product is a mixture.
CAS Number: Does not apply. Product is a mixture.
Formula: See section III
Synonyms: None
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components:	OSHA-PEL	ACGIH-TLV
Ammonium Nitrate(CAS# 6484-52-2)	None	None
Ammonium Phosphate(CAS# 7722-76-1)	None	None
Calcium Phosphate (CAS# 1306-06-5)	None	None
Potassium Sulfate(CAS# 7778-80-5)	None	None
Nuisance Dust	15 mg(F)/m ³	3 mg(F)/m ³

Each prill is coated with a resin made from vegetable oil. This product coating is expected to minimize airborne exposures.

3. HAZARD IDENTIFICATION

Emergency Overview: Ammonium nitrate is an allergen. Prolonged or repeated direct contact with fertilizer may irritate eyes and skin. Inhalation of dust may irritate nose, throat, and lungs. Prolonged exposure may cause weakness, depression, mental impairment, anemia, methemoglobinemia, and kidney injury.

Ingestion of product can cause severe gastrointestinal irritation, muscular weakness, and blue-tinged skin(cyanosis). Infants and children are especially at risk for cyanosis.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water.

Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): Decomposes on heating

NFPA Rating: Health:2 Flammability:0 Reactivity:1

Extinguisher Media: Water

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

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Special Firefighting Procedures: Flood with water to cool containers. Wear self-contained breathing apparatus to fight large fires.
Unusual Fire and Explosion Hazards: Decomposes on heating to emit toxic ammonia and oxides of nitrogen, phosphorous, potassium, and sulfur. High airborne dust concentrations have the potential for explosion.

6. SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Avoid contact with skin, eyes, or clothing. Avoid dusting or misting conditions during cleanup. Wash thoroughly with soap and water after handling. If material is contaminated, containerize for disposal. If material is uncontaminated, collect and reuse as recommended for product. Keep spills away from drinking water supply. After cleaning up spill, flush area with water.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Protect from heat and moisture. Keep container closed. Store away from feed and foodstuffs. Wash hands with soap and water after handling product. Keep out of reach of children.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type): If airborne dust levels are high, use a combination of ventilation and NIOSH/MSHA approved respirator for dusts, mists, and fumes to reduce exposures to acceptable levels.

Ventilation:

Local Exhaust:	Recommended
Mechanical(General):	Acceptable
Special:	No
Other:	No

Protective Gloves: None required for normal use. If prolonged or repeated use irritates skin, use neoprene or PVC gloves.

Eye Protection: None required for routine use. However, chemical goggles are always recommended in potential dusting situations.

Other Protective Clothing or Equipment: Running water should be available in case material gets in eyes.

9. PHYSICAL DATA

Molecular Weight:	Product is a mixture.
Melting Point:	Decomposes on heating.
Boiling Point:	Decomposes on heating.
Vapor Pressure:	N/A
Vapor Density(Air=1):	Nonvolatile
Specific Gravity(H2O=1):	1.2
Percent Volatile by Volume:	N/A
Evaporation Rate(H2O=1):	N/A
Solubility in Water:	80 - 85 %
Appearance and Odor:	Odorless, mixed light and dark tan prills

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Extreme heat. Contact with fuels and other organic or combustible materials.

Incompatibility(Materials to Avoid): Strong reducing agents, active metals such as aluminum and magnesium.

Hazardous Decomposition Products: Ammonia and oxides of nitrogen,

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phosphorous, potassium, and sulfur.
Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data:

For ammonium nitrate, orl-rat LD50: 2217 mg/kg
For calcium phosphate monobasic, orl-rat LD50: 17500 mg/kg
For potassium sulfate, orl-rat LD50: 6600 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: No chronic effects data cited. Not listed as causing cancer by IARC, NTP, or OSHA.

Conditions Aggravated by Overexposure: Ammonium nitrate allergies and skin

abrasions and sores.

Target Organs: Skin, eyes, respiratory tract, and gastrointestinal tract.

Primary Route(s) of Entry: Ingestion, inhalation.

12. ECOLOGICAL DATA

EPA Waste Numbers: N/A

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

N/A

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory RTECS ON CDROM

Hazard Category for SARA Section 311/312 Reporting: Acute 40CFR370.40

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Chemicals Name List	Chemical Category		
Ammonium nitrate	No	No	No	No	No
Calcium phosphate	No	No	No	No	No
Ammonium phosphate	No	No	No	No	No
Potassium sulfate	No	No	No	No	No

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

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CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act