

MATERIAL SAFETY DATA SHEET



Osmocote® Plus Controlled Release Fertilizer 15-9-12

90326-6

Scotts-Sierra Horticultural Products Co.
The Scotts Company
14111 Scottslawn Road
Marysville, Ohio 43041

In Case of Emergency call:
1-937-644-0011 (USA)
For non-Emergency calls:
1-937-644-0011 (USA)

I. MATERIAL IDENTIFICATION

Product Name:	Osmocote® Plus Controlled Release Fertilizer	NFPA Hazard Ratings	
Analysis:	15-9-12	Health 2	0 Least
Stock Number:	90326-6	Flammability 0	1 Slight
		Reactivity 1	2 Moderate
			3 High

II. HAZARDOUS INGREDIENTS

<u>MATERIAL</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ammonium Nitrate	6484-52-2	None	None
Ammonium Phosphates	7783-28-0/7722-76-1	None	None
Calcium Phosphates	7758-23-8/7757-93-9/7758-87-4	None	None
Calcium Fluoride	7789-75-5	2.5 mg(F)/m3	2.5 mg(F)/m3
Potassium Nitrate	7757-79-1	None	None
Magnesium Sulfate	10034-99-8/7487-88-9	None	None
Boric Acid	10043-35-3	None	None
Copper Sulfate	7758-98-7	None	1.0mg(Cu)/m3
Ferrous Sulfate	7782-63-0	1mg(Fe)/m3	1mg(Fe)/m3
Iron EDTA	15708-41-5	None	None
Manganese Sulfate	7785-87-7	5mg(Mn)/m3	5mg(Mn)/m3
Sodium Molybdate	7631-95-0	5mg(Mo)/m3	5mg(Mo)/m3
Zinc Sulfate	7733-02-0	None	None
Zinc Oxide	1314-13-2	5mg/m3	10mg/m3

This product consists of prills coated with a resin made from a vegetable oil (linseed oil or soybean oil) reacted with a cyclic diene.

All exposure limits are for airborne 8-hour time-weighted averages and apply only to occupational exposures. Product coating is expected to minimize airborne exposures.

The ACGIH Threshold Limit Values for nuisance (inert) dusts containing <1% crystalline silica and no asbestos are: 10 mg/m³ total, 5 mg/m³ respirable.

III. FIRST AID PROCEDURES

Eyes: If in eyes, flush with water for 15 minutes holding eyelids open. Get medical attention if irritation persists.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Have conscious person drink 1 to 2 glasses of water, then induce repeated vomiting until vomit is clear. Call physician.

Skin: Wash with plenty of soap and water.

Inhalation: Remove to fresh air. Treat symptomatically.

IV. HEALTH HAZARD INFORMATION

Summary of Risks

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, headache, 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. Ingestion of large amounts may result in death.

Inhalation of heavy concentrations of manganese-containing dusts over very prolonged periods of exposure (usually one to three years) has been reported to cause damage to the central nervous system.

Medical conditions which may

be aggravated by contact: Skin abrasions and sores. Inhalation of dust may aggravate asthma.

Target Organs: Skin, eyes, respiratory tract, gastrointestinal tract, and central nervous system.

Primary Entry Route(s): Ingestion, inhalation.

Chronic Effect(s): See Summary:

Ingredients Listed as a Carcinogen

IARC Monographs: No

NTP: No

OSHA: No

V. PERSONAL PROTECTION AND PRECAUTIONS

Warning Properties of Uncoated Fertilizer: Irritation of eyes, nose, or mouth.

Goggles: None required for routine use as fertilizer. High airborne dust levels or mists of product dissolved in liquid may be irritating; use chemical goggles.

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

Respirator: If airborne dust levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection (e.g. NIOSH/MSHA approved respirator for dusts, mists, and fumes) to reduce exposures to acceptable levels.

Ventilation: Ventilation and personal protection are recommended whenever dust levels are high or product does not remain intact.

Workplace Considerations

Ventilation: Ventilation and personal protection are recommended whenever dust levels are high or product does not remain intact.

Safety Stations: Running water should be available in case material gets in eyes.

Other: Ingredients with occupational exposure limits comprise a small percentage of the total product. For this reason, it is not expected that these limits will be exceeded unless the nuisance dust standards are exceeded.

VI. PHYSICAL HAZARD INFORMATION

Flammable Limits (% in Air):	Not Applicable	Color:	Mixed light/dark tan
Extinguishing Media:	Water	Odor:	None
Auto Ignition Temperature:	Not Applicable	Melting Point:	Decomposes on heating
Flash Point (method):	Decomposes on heating	Boiling Point:	Decomposes on heating
		Solubility in H ₂ O	80-85%
		Specific Gravity:	(H ₂ O = 1) 1.1
<u>Reactivity</u>		Vapor Pressure:	Not Known
Stability:	Stable	Evaporation Rate:	Not Applicable
Hazardous Polymerization:	Will Not Occur		
Conditions to Avoid:	Extreme heat. Contact with strong alkalis, oxidizers, and reducing agents. Contact with fuels and other organic or combustible materials. Active metals such as aluminum and magnesium.		
Hazardous Decomposition Products:	In a fire, may produce oxides of nitrogen, phosphorus, potassium, and sulfur, as well as ammonia.		
Chemical Incompatibilities:	Strong oxidizing (permanganate, dichromate, nitrate, chlorine) and reducing agents, sodium nitrite and many chlorine compounds (including household bleach and other cleaning products). Active metals such as aluminum and magnesium.		
Unusual Fire, Explosion and Reactivity Hazards:	Decomposes on heating to emit toxic oxides of nitrogen, phosphorus, potassium, and sulfur, as well as ammonia. High airborne dust concentrations have the potential for explosion.		
<u>In Case of Fire:</u>	Evacuate area. Flood with water to cool containers. Wear self-contained breathing apparatus to fight large fires.		

VII. REGULATORY INFORMATION

DOT Classification: Not DOT regulated.

VIII. STORAGE AND SPECIAL PRECAUTIONSPrecautions to be taken in handling and storage

Store in a cool, dry area away from incompatible materials and heat sources. Store away from feed and foodstuffs, as well as household cleaning products. Wash hands with soap and water after handling product. Keep out of reach of children.

In case of spills

Avoid dusting or misting conditions during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose. Keep spills away from drinking water supplies. After cleaning up spill, flush area with water.

Waste Management/Disposal

Apply as fertilizer to field. If product is contaminated, dispose of in an approved landfill disposal facility, in accordance with applicable federal, state, and local regulations.

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