

AP[®] INVESTIGATION #1

ARTIFICIAL SELECTION – STUDENT GUIDE

Kit # 36W7401

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MATERIAL SAFETY DATA SHEET**Date-Issued:** 11/20/2000**MSDS Ref. No:** 100052**Date-Revised:** 11/29/2000**Revision No:** New MSDS**Miracle-Gro® Liquid All Purpose Plant Food 8-7-6****1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** Miracle-Gro® Liquid All Purpose Plant Food 8-7-6**PRODUCT DESCRIPTION:** Mixture**MANUFACTURER**

The Scotts Company
 Hyponex - Miracle Gro - Scotts Sierra
 14111 Scottslawn Road
 Marysville, OH 43041

**24 HR. EMERGENCY
TELEPHONE NUMBERS****CHEMTREC (U.S.):** (800) 424-9300**International:** 1-703-527-3887**Emergency Phone:** 1-937-644-0011**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Chemical Name</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Urea	57-13-6	None	None
Ammonium Phosphate	7722-76-1	None	None
Potassium Nitrate	7757-79-1	None	None
Potassium Phosphate	7778-77-0	None	None
Iron EDTA	15708-41-5	None	None

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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE:Light green liquid.

IMMEDIATE CONCERNS:High dust concentrations may cause mild upper respiratory tract irritation with coughing and nasal discharge. Eye or skin contact may cause mild, transient irritation.

POTENTIAL HEALTH EFFECTS

EYES:May cause slight, temporary irritation.

SKIN:May cause mild irritation.

INGESTION:May cause nausea, vomiting along with mild irritation to the mouth, throat, esophagus and stomach.

INHALATION:High dust concentrations may cause mild upper respiratory tract irritation with coughing and nasal discharge.

ROUTES OF ENTRY:Ingestion, skin, inhalation, and eyes.

4. FIRST AID MEASURES

EYES:If in eyes, 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. Call a poison control center or doctor for treatment advice.

SKIN:If on skin or clothing, 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.

INGESTION:If swallowed, 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

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vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. Call a poison control center or doctor for further treatment advice. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: There are limited data regarding this product. Exposure to this product can occur by eye and skin contact, ingestion, or inhalation of dusts. Eye contact may cause slight, temporary irritation. Skin contact may cause mild irritation. Ingestion may cause nausea, vomiting along with mild irritation to the mouth, throat, esophagus and stomach. High dust concentrations may cause mild respiratory tract irritation with coughing and nasal discharge.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Non-Combustible

EXTINGUISHING MEDIA: Water spray, carbon dioxide, fine earth, dry chemical, or sand. Use extinguishing media appropriate for the surrounding fire.

EXPLOSION HAZARDS: Keep away from heat, sparks, or flames. Flood with water to cool containers.

FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides (NO², NO_x), potassium and potassium containing compounds, ammonia, cyanuric acid, cyanic acid, and phosphorus and phosphorus containing compounds (e.g. phosphine).

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Extinguish all ignition sources. Flush area with water. Do not attempt to clean-up spills without appropriate protective equipment. Large spills could possibly

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affect vegetation or cause illness to animals. Prevent large quantities from contacting vegetation or waterways. Keep animals away from large spills.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Rinse all equipment after use. Collect all rinse water and apply to appropriate lawn/garden areas.

HANDLING:

Wash hands with soap and water after handling product. Follow specific use instructions supplied with product.

STORAGE:

Store in cool, dry area in closed container or package. Keep containers closed at all times. Do not reuse containers. Store away from incompatible materials. Use with proper personal protective equipment. **KEEP OUT OF REACH OF CHILDREN.**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: If industrial hygiene surveys show that exposures exceed TLV's or other exposure limits, use a combination of local exhaust and general dilution/ventilation to control exposures.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields are recommended.

SKIN: Protective gloves recommended. Contact glove manufacturer for more information.

RESPIRATORY: If concentrations are below established limits, no respiratory protection is necessary. If concentrations exceed the limits, NIOSH approved respiratory protection may be necessary. Seek professional advice prior to respirator selection or use.

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Follow OSHA respiratory regulations (29 CFR 1910.134). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

OTHER USE PRECAUTIONS: Eyewash and deluge shower recommended.

COMMENTS: The ACGIH Threshold Limit Values (TLV) for nuisance (inert) dusts containing <1% crystalline silica and no asbestos are: 10 mg/m³ inhalable particulates and 3 mg/m³ respirable particulate. The OSHA TLV is 15 mg/m³ total dust, 5 mg/m³ respirable fraction.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slight ammonia odor.

APPEARANCE: Light green liquid.

BOILING POINT: 100°C (212°F)

SOLUBILITY IN WATER: 100%

SPECIFIC GRAVITY: 1.20

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Excessive heat, contact with strong alkalis, fuels, other combustible materials, strong oxidizing agents (permanganate, dichromate, chlorine, etc.), reducing agents, sodium nitrite, and many chlorine compounds (e.g. sodium hypochlorite, sodium chlorate, pool chemicals, household bleach and other cleaning products). Active

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metals such as aluminum and magnesium.

STABILITY: Stable

POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides (NO², NO_x), potassium and potassium containing compounds, ammonia, cyanuric acid, cyanic acid, and phosphorus and phosphorus containing compounds (e.g. phosphine).

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

GENERAL COMMENTS: This product contains urea (CAS#57-13-6) and is affirmed as generally recognized as safe (GRAS) in accordance with U.S. FDA, 21 CFR, 184. Exposure can occur by eye or skin contact, ingestion, or inhalation of dusts or mists. Eye contact with an unspecified amount of urea powder has caused reversible corneal opacity along with irritation as a foreign body in the eye with tearing, and blinking. Skin contact with powdered urea is not expected to cause irritation. Dermal absorption is expected to be minimal (6-11%). Ingestion is expected to cause nausea, vomiting, and possible excitement and convulsions. These high exposure levels are not considered relevant to occupational or normal use exposure situations. The rat-oral LD50 for urea is 8471 mg/kg. All materials contained in this product are considered to have low toxicity by the expected routes of exposure.

12. ECOLOGICAL INFORMATION

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ECOTOXICOLOGICAL INFORMATION: Prevent large quantities from contacting vegetation or waterways. Keep animals away from large spills. This material is highly beneficial to plant life. There are no known adverse effects on aquatic life.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste disposal must be in accordance with Federal, state, and local regulations. Be aware that the waste owner has responsibility for final disposal. Regulations may also apply to empty containers, liners or rinsate. Laws may change or be reinterpreted; state and local regulations may be different from Federal regulations. This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: This product is not DOT regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

**FIRE:NO PRESSURE GENERATING:NO REACTIVITY:NO ACUTE:YES
CHRONIC:NO**

PROPOSITION 65 STATEMENT: None of the indicated components of this product are listed on the State of California's Safe Drinking Water and Toxic Enforcement

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Act of 1986 (Proposition 65) list of chemicals known to cause reproductive toxicity or cancer.

16. OTHER INFORMATION

REVISION SUMMARY

New MSDS

NFPA CODES

HEALTH:1 FIRE:0 REACTIVITY:0

HMIS CODES

HEALTH:1 FIRE:0 REACTIVITY:0

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