

MATERIAL SAFETY DATA SHEET

Date-Issued: 02/04/2004

MSDS Ref. No: 100557

Date-Revised: 02/04/2004

Revision No: New MSDS

Miracle-Gro® Quick Start® Transplant Starter Solution 4-12-4

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Miracle-Gro® Quick Start® Transplant Starter Solution 4-12-4

PRODUCT DESCRIPTION: Liquid Plant Food

MANUFACTURER

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

PN: S9507

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>
Ammonium Phosphate	7722-76-1	None	None
Potassium Phosphate	7778-77-0	None	None
Urea	57-13-6	None	None

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. Material exposure limits are for airborne 8-hour time-weighted averages and apply only to occupational exposures.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Avoid contact with eyes- may cause eye irritation. Keep out of reach of children.

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: Mists may cause upper respiratory tract irritation.

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

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. 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 aerosol concentrations may cause mild respiratory tract irritation with coughing and nasal discharge.

COMMENTS: See product label for specific First Aid Measures. The above measures are the most conservative and would apply in the event a product label is not immediately available.

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 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: See label. Protective eye wear is not required for normal product use. Wear appropriate eye protection in manufacturing situations where contact may result.

SKIN: See label. No special protective clothing is required under normal use conditions.

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. 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: In manufacturing operations, eyewash and deluge shower recommended.

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: ~ 1.2

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Excessive heat, contact with strong alkalis, fuels, or 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 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:

CARCINOGENICITY COMMENTS: IARC: No; NTP: No; OSHA: No

GENERAL COMMENTS: There are limited data regarding this product. Exposure to this product can occur by eye and skin contact, ingestion, or inhalation of dust/mists. Eye contact may cause slight, temporary irritation. Skin contact may cause mild irritation in susceptible persons. High dust/mist concentrations may cause mild respiratory tract irritation with coughing and nasal discharge. Ingestion may result in gastrointestinal irritation. All materials contained in this product are considered to have low toxicity by the expected routes of exposure.

12. ECOLOGICAL INFORMATION

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: Not DOT regulated.

OTHER SHIPPING INFORMATION: The transportation information shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping regulations.

15. REGULATORY INFORMATION

GENERAL COMMENTS: Contact local authorities for proper disposal of large quantities of unused product.

16. OTHER INFORMATION

REVISION SUMMARY New MSDS

NFPA CODES

HEALTH: 1 FIRE: 0 REACTIVITY: 0

MANUFACTURER DISCLAIMER: The information contained herein is, to the best of the Manufacturer's (see Section 1) knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Manufacturer shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, the Manufacturer shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

ADDITIONAL MSDS INFORMATION: NFPA Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe.

GENERAL STATEMENTS: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.