

MATERIAL SAFETY DATA SHEET

HARRELL'S

Emergency Phone: 800-282-8007
Harrell's, Inc.
P. O. Box 807
Lakeland, FL 33802

Harrell's Turf Fertilizer With Ronstar*

Effective Date: 01/15/04

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Harrell's Fertilizer with Ronstar

COMPANY IDENTIFICATION:

Harrell's, Inc.
P. O. Box 807
Lakeland, FL 33802

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Oxadiazon	CAS # 19666-30-9	0.67 – 1.20%
Other Ingredients, Total, Including		98.8 – 99.33%
Silica-Quartz (sand)		0 - 50.00%
Fluoride Salts as Fluorine		0 - 1.30%
Fertilizers-Nitrates		0 - 50.00%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

3. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Multi-colored solid granules. May cause eye irritation.

EMERGENCY PHONE NUMBER: 800-282-8007

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause slight eye irritation.

SKIN: Prolonged exposure may cause skin irritation with local redness. Prolonged or frequently repeated skin contact may cause an allergic skin reaction in some individuals. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ of oxadiazon for skin absorption in rabbits is >2000 mg/kg.

INGESTION: Very low toxicity if swallowed. The oral LD₅₀ for oxadiazon for rats is >5000 mg/kg. Harmful effects not anticipated from swallowing small amounts.

INHALATION: At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

EFFECTS OF OVEREXPOSURE: Long-term inhalation of dust concentrations higher than recommended PEL may cause delayed lung injury. The free silica mentioned in Section 2. is sand and little or none is present in the respirable size range.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Contains components which, in animals, have been shown to cause liver, kidney bladder, spleen or blood effects.

CANCER INFORMATION: This product contains ingredients that are considered to be probable or suspected human carcinogens.

TERATOLOGY: Oxadiazon did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

REPRODUCTIVE EFFECTS: Oxadiazon did not interfere with reproduction in animal studies.

4. FIRST AID:

EYE: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: 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 do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES:

FLASH POINT: Not applicable

FLAMMABLE LIMITS: Not applicable

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EXTINGUISHING MEDIA: Spread out and cool, apply water if necessary.

FIRE & EXPLOSION HAZARDS: If heated to decomposition, the fertilizer contained in this product will give off toxic vapors of ammonia and formaldehyde. Under fire conditions, urea may decompose to cyanuric acid, biuret or ammonia. Dispersion of fine dust in the air may form an explosive mixture.

FIRE-FIGHTING EQUIPMENT: Use self-contained breathing apparatus with enclosed fires.

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS/LEAKS: If uncontaminated, sweep or collect and use as product. If contaminated, collect in suitable containers.

WASTE DISPOSAL METHOD: Contaminated material should be disposed of in accordance with applicable local, State and Federal regulations.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORAGE: Store in a cool dry area designated specifically for pesticides. Do not store near any material intended for use or consumption by humans or animals.

HANDLING: Do not handle material near food, feed or drinking water.

STORAGE TEMPERATURE (MIN/MAX): None

SHELF LIFE: Not noted

SPECIAL SENSITIVITY: Not noted

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINES: None established.

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

EYE/FACE PROTECTION: If high dust concentrations exist, tight fitting goggles are recommended.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

RESPIRATORY PROTECTION: If dust concentrations exceed recommended PEL, use NIOSH-approved dust respirators with approval TC-21C-xxx.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Multi-colored solid granules

ODOR: None

BOILING POINT: Not applicable

MELTING POINT: Not applicable

VAPOR PRESSURE: Negligible

VAPOR DENSITY: Not applicable

SOLUBILITY IN WATER: Not applicable

SPECIFIC GRAVITY: 50-60 lb/cu.ft.

PERCENT VOLATILITY: 0%

pH: Not applicable

VISCOSITY: Not applicable

EVAPORATION RATE: Not applicable

10. STABILITY AND REACTIVITY:

STABILITY: This is a stable material.

INCOMPATIBILITY: Alkalis, heat. Alkalis may cause ammonia release.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION:

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MUTAGENICITY: For the components tested, in-vitro and animal mutagenicity studies were negative.

with numerous federal, state or provincial, and local laws and regulations.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL FATE:

MOVEMENT & PARTITIONING:

No data available for oxadiazon.
Based largely or completely on information for the silica.
Partitioning from water to n-octanol is not applicable.

DEGRADATION & PERSISTENCE:

No data are available for oxadiazon.
Based largely or completely on information for the silica.
Biodegradation is not applicable.

ECOTOXICOLOGY:

Based largely or completely on information for the silica.
Not expected to be acutely toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: Follow container label instructions for disposal of wastes generated during use in compliance with product label. In other situations, bury in an EPA approved landfill or burn in an incinerator approved for pesticide destruction. Do not reuse container.

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION:

TECHNICAL SHIPPING NAME: Oxadiazon.
FREIGHT CLASS BULK: Fertilizing compounds, NOI
FREIGHT CLASS PACKAGE: Fertilizing compounds, NOI
PRODUCT LABEL: Not noted
PROPER SHIPPING NAME: Not hazardous or regulated
HAZARD CLASS OR DEVISION: Non-regulated

15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of New Jersey and Pennsylvania.

OSHA HAZARD COMMUNICATION STANDARD: This product is hazardous as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

16. OTHER INFORMATION:

MSDS STATUS: New

The Information Herein Is Given In good Faith, But No Warranty, Express Or Implied, Is Made. Consult Harrell's Inc. for Further Information.