1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Scotts® HALTS® Crabgrass Preventer
PRODUCT DESCRIPTION: Crabgrass Preventer

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-(1-Ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine</td>
<td>40487-42-1</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: - CAUTION
- Avoid contact with eyes, skin, or clothing.
- Causes eye irritation.
- May be harmful if swallowed.
- KEEP OUT OF REACH OF CHILDREN.

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation.

INGESTION: Possible nausea, vomiting, diarrhea.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.
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.

COMMENTS: See product label for specific First Aid Measures. The above measures are the most conservative - Pesticide Registration (PR) Notice 2000-3 - April 11, 2000 - and apply in the event a product label is not immediately available.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, water, CO2.

FIRE FIGHTING PROCEDURES: Use self-contained air supply. Contain run-off as ingredients may be toxic to aquatic organisms.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Sweep up spills. Use good housekeeping practices. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove to approved landfill.

7. HANDLING AND STORAGE

HANDLING: See Label. Avoid container breakage. Wash hands with soap and water after handling products. Avoid inhalation or contact with skin, eyes or clothing. Avoid contamination with oxidizing agents or strong alkali. Do not graze treated areas. Do not feed clippings to livestock. KEEP OUT OF REACH OF CHILDREN.

STORAGE: See label. KEEP OUT OF REACH OF CHILDREN. Avoid container breakage. Store in cool, dry area in closed container or package. Keep away from feed or foodstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use adequate ventilation to keep the airborne concentrations of this material below
PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: See label. Protective eye wear is normally not required but is suggested so contact can be avoided.

SKIN: See label. No special protective clothing is necessary under normal use conditions. Gardening gloves are suggested for repeated handling of lawn care products. Applicators should wear long-sleeved shirt, long pants, shoes and socks.

RESPIRATORY: If airborne dust levels are high, a dust mask is recommended to avoid inhalation.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Granular

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

INCOMPATIBLE MATERIALS: None known.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Pendimethalin, the active ingredient, is considered to be a mild eye irritant in rabbits.

DERMAL LD₅₀: Pendimethalin is slightly to practically nontoxic by skin exposure, with reported dermal LD50 values of >2000 mg/kg. It is not a skin irritant.

ORAL LD₅₀: Pendimethalin is slightly to practically nontoxic by ingestion, with reported oral LD50 values of 1050 mg/kg to >5000 mg/kg in rats.

INHALATION LC₅₀: The inhalation 4-hour LC50 for technical pendimethalin in rats is 320 mg/L air, indicating practically no toxicity via the inhalation route of exposure. Inhalation of dusts or fumes may be mildly to moderately irritating to the linings of the mouth, nose, throat, and lungs.

SENSITIZATION: Pendimethalin is not reported to be skin sensitizer in rabbits or guinea pigs.

SUBCHRONIC:

Chronic exposure to pendimethalin has resulted in increased liver weights in test animals. Increases in alkaline phosphatase level and liver weight were produced in dogs fed 50 mg/kg/day for 2 years, but not at a dose of 12.5 mg/kg/day. In a 90-day feeding study of rats, no effects were observed a doses of 40 mg/kg/day.
CARCINOGENICITY:

IARC: No
NTP: No
OSHA: No

CARCINOGENICITY COMMENTS: Evidence indicates pendimethalin is not a carcinogen. Pendimethalin did not increase tumor formation in mice given dietary doses of 75 mg/kg/day over an 18-month period.

MUTAGENICITY: Testing in animals and mammalian and bacterial cell cultures have all indicated that pendimethalin has no mutagenic activity.

REPRODUCTIVE EFFECTS: Evidence from animal tests indicates that under normal circumstances, pendimethalin is unlikely to cause reproductive effects in humans.

TERATOGENIC EFFECTS: Not considered to be a teratogen

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: The reported LC50 for pendimethalin in bluegill sunfish (199 ug/L), rainbow trout (138 ug/L), catfish (420 ug/L), and 48-hr. LC50 in Daphnia magna (280 ug/L) indicate it is a marine pollutant (i.e., LC50 less than or equal to 1ppm; 1 mg/L), Pesticide Profiles, CRC Press, p 505, 1997.

DISTRIBUTION: Pendimethalin is absorbed by plant roots and shoots, and inhibits cell division and cell elongation. Once absorbed into plant tissues, translocation is limited and pendimethalin breaks down via oxidation. Pendimethalin is not absorbed by the leaves of grasses, and only very small amounts are taken up by plants from the soil. Resides on crops at harvest are usually below detectable levels (0.05 ppm). Pesticide Profiles, Toxicity, Environmental Impact, and Fate. CRC Press, 1997, p503-504.

CHEMICAL FATE INFORMATION: Pendimethalin is moderately persistent, with a field half-life of approximately 40 days. It does not undergo rapid microbial degradation except under anerobic conditions. Slight losses of pendimethalin can result from photodecomposition and volatilization. Pendimethalin is strongly adsorbed by most soils. Increasing soil orgainc matter and clay is associated with increased soil binding capacity. It is practically insoluble in water, and thus will not leach appreciably in most soils, and should present a minimal risk of groundwater contamination.

COMMENTS: This pesticide is toxic to fish. Do not apply directly to water. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Securely wrap original container in several layers of newspaper and discard in trash. Do not reuse container.

GENERAL COMMENTS: Do not contaminate water sources by cleaning of equipment or disposal of wastes.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
PROPER SHIPPING NAME: Not DOT regulated.
MARINE POLLUTANT #1: Pendimethalin: Marine Pollutant
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: 2  FIRE: 2  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.

COMMENTS: Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved product label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.