

Material Safety Data Sheet



5-4-17

Amaze® Grass & Weed Preventer₂

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Amaze® Grass & Weed Preventer₂
EPA REGISTRATION NUMBER: 70506-56-85827
PRODUCT DESCRIPTION: Herbicide

Green Light AMAZE
Grass-&-Weed preventer

MANUFACTURER/DISTRIBUTOR
GREEN LIGHT, A VALENT U.S.A. COMPANY
P.O. Box 8025
1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

EMERGENCY TELEPHONE NUMBERS
HEALTH EMERGENCY OR SPILL (24 hr):
(800) 892-0099
TRANSPORTATION (24 hr.): CHEMTREC
(800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION
GREEN LIGHT PRODUCTS: (800) 777-5702

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- CAUTION**
- Toxic to fish and aquatic invertebrates
 - Causes moderate eye irritation
 - Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals
 - Avoid contact with eyes or clothing
 - Keep out of reach of children

POTENTIAL HEALTH EFFECTS

Acute Toxicity (Primary Routes of Exposure): Skin, Eyes

Acute Eye Contact: Causes moderate eye irritation.

Acute Skin Contact: Prolonged or frequently repeated skin contact may cause allergic reactions.

Acute Ingestion: No data available.

Acute Inhalation: This formulation is not considered to be an inhalation hazard due to coarse granular nature and low potential for aerosolization.

Signs and Symptoms of Systemic Effects:

Benefin - From field experience with finished products containing benefin, some of which contain organic solvents, there have been reports of nausea, headache, rash, eye irritation, and dyspnea. Rare or singular events also reported: fever, paresthesia, drowsiness, aplastic anemia, chills, pain, loss of memory, diaphoresis, mouth burning, hand burning, face edema, loss of taste, muscle spasm, and dizziness.

Oryzalin - The most commonly reported effect of exposure is contact dermatitis or rash. Some cases have occurred during manufacture and may be related to an intermediate chemical, but other reports have involved finished products of oryzalin. Eye irritation may also occur. One instance of ingestion was uneventful.

Emergency Telephone: (800) 892-0099
REVISION NUMBER: 1

MSDS NO.: GNL-0007
REVISION DATE: 09/21/2011

Potentially Aggravated Medical Conditions: No corroborative information is available that would establish the aggravation of a medical condition by exposure to Amaze®. Animal studies indicate that Benefin may be a potential contact sensitiser, but this has not been shown to occur under normal conditions of use. Highly allergic individuals should take special precautions to avoid skin contact with Amaze® or breathing of dust.

For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Ecotox/Environmental Information, refer to Section 12. For Regulatory Information, refer to Section 15.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight/ Percent	Purpose
N-Butyl-N-ethyl-alpha, alpha, alpha-trifluoro-2,6-dinitro-p-toluidine(Benefin)	1861-40-1	1	Active Ingredient
3,5-dinitro-N4, N4-dipropylsulfa-nilamide(oryzalin)	19044-88-3	1	Active Ingredient
Other ingredients	Various CAS#s	98	Other Ingredients

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling (800) 892-0099 at any time.

4. FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

EYE CONTACT:

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 eye. Call a poison control center or doctor for treatment advice.

SKIN CONTACT:

Wash with soap and water. Remove and wash contaminated clothing separately. Get medical attention if irritation persists.

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. Do not give anything by mouth to an unconscious person. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water.

INHALATION:

Coarse granular particles make inadvertent inhalation unlikely. Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN:

None

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable
EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical
FLAMMABLE LIMITS IN AIR - LOWER (%): Not applicable
FLAMMABLE LIMITS IN AIR - UPPER (%): Not applicable

NFPA RATING:

Health: 2
Flammability: 1
Reactivity: 0
Special: None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: Will not burn but if involved in a fire toxic fumes may be evolved. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes may be evolved if involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

GREEN LIGHT EMERGENCY PHONE NUMBER: (800) 892-0099

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable

EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

FOR SPILLS ON LAND

CONTAINMENT: In case of spill or leak on floor or paved surfaces avoid contact, isolate area and keep out animals and unprotected persons.

CLEANUP: Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER

CONTAINMENT: This material is insoluble in water. This material will sink to the bottom. Stop or reduce contamination of any water. Isolate contaminated water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

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7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

STORAGE:

Store in original container in a cool dry place, out of reach of children, preferably a locked storage cabinet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATORY PROTECTION: Not required with normal use. Use in a well ventilated area.

SKIN & HAND PROTECTION: Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves.

ENGINEERING CONTROLS: Provide adequate ventilation.

EXPOSURE LIMITS

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
N-Butyl-N-ethyl-alpha, alpha, alpha-trifluoro-2,6-dinitro-p-toluidine(Benefin)	None	None	None
3,5-dinitro-N4, N4-dipropylsulfa-nilamide(oryzalin)	None	None	None
Other ingredients	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	Granule
COLOR:	Light yellow orange
ODOR:	Slight aromatic
FLASH POINT:	Not applicable
pH:	7.5 to 8.5
SOLUBILITY:	Insoluble in water

10. STABILITY AND REACTIVITY

INCOMPATIBILITY:	None known
OXIDATION/REDUCTION PROPERTIES:	No data available
EXPLODABILITY:	Not expected to be explosive
HAZARDOUS DECOMPOSITION PRODUCTS:	Toxic fumes may be evolved if involved in a fire.
HAZARDOUS POLYMERIZATION :	Will not occur
CONDITIONS TO AVOID:	None known

11. TOXICOLOGICAL INFORMATION**ACUTE TOXICITY:**

Oral Toxicity LD ₅₀ (rats)	3750 mg/kg	EPA Tox Category	III
Dermal Toxicity LD ₅₀ (rabbits)	2000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC ₅₀ (rats)	Not available	EPA Tox Category	Not applicable
Eye Irritation (rabbits)	Irritant	EPA Tox Category	III
Skin Irritation (rabbits)	Slightly irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

Chemical Name	IARC - Group 1 (carcinogenic to humans)	IARC - Group 2A (Probably carcinogenic)	IARC - Group 2B (Possibly carcinogenic)	NTP Carcinogen List
N-Butyl-N-ethyl-alpha, alpha, alpha-trifluoro-2,6-dinitro-p-toluidine(Benefin)	No	No	No	Not listed
3,5-dinitro-N4, N4-dipropylsulfa-nilamide(oryzalin)	No	No	No	Not listed

TOXICITY OF BENEFIN TECHNICAL

CHRONIC/CARCINOGENICITY: Repeated large oral doses of benefin produced liver effects that included increased weight, and enzyme activity and enlargement of liver cells. Additional effects included reduced growth and survival, decreased hemoglobin and red blood cell counts, and increased weights of thyroids, uterus, ovaries, and testes.

Not listed as a carcinogen or potential carcinogen by ACGIH, NCI/NTP, IARC, or OSHA. Not considered to be carcinogenic in lifetime feeding studies.

REPRODUCTION: No reproductive or teratogenic (birth defect) effects at normal exposure levels.

MUTAGENICITY: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

TOXICITY OF ORYZALIN TECHNICAL

CHRONIC/CARCINOGENICITY: Growth retardation; decreased survival; decreased blood sugar levels; decreased red blood cell counts; decreased hemoglobin; increased cholesterol, blood urea nitrogen, bilirubin, and alkaline phosphatase; increased liver, kidney, spleen; and testes weights; increased thyroid tumors probably secondary to the antithyroid activity of oryzalin; increased incidence of benign skin and mammary gland tumors.

Not listed as a carcinogen or potential carcinogen by ACGIH, NCI/NTP, IARC, or OSHA. Not considered to be carcinogenic in lifetime feeding studies. EPA - Class C - possible human carcinogen (limited evidence from animal studies).

REPRODUCTION: No reproductive or teratogenic (birth defect) effects at normal exposure levels.

MUTAGENICITY: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION**OTHER ENVIRONMENTAL INFORMATION:**

This product is toxic to fish and other aquatic invertebrates. Do not apply directly to water. Do not contaminate water by disposal of wastes.

13. DISPOSAL CONSIDERATIONS**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. **If empty:** Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations.

14. TRANSPORT INFORMATION

UN/NA NUMBER:	Not applicable
TECHNICAL NAME (hazardous material):	Not applicable
HAZARD CLASS:	Not applicable
PACKING GROUP:	Not applicable
DOT REPORTABLE QUANTITY (RQ):	Not applicable
REMARKS:	None
EXEMPTION REQUIREMENT:	None
EMERGENCY RESPONSE GUIDEBOOK NO.:	Not applicable
MARINE POLLUTANT:	Not applicable

15. REGULATORY INFORMATION

PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS:

Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

SARA (311, 312):

Immediate Health:	Yes
Chronic Health:	Yes
Fire:	No
Sudden Pressure:	No
Reactivity:	No

STATE REGULATIONS:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE:	New Green Light MSDS
MSDS NO.:	GNL-0007
EPA REGISTRATION NUMBER:	70506-56-85827
REVISION NUMBER:	1
REVISION DATE:	09/21/2011
SUPERCEDES DATE:	None
RESPONSIBLE PERSON(S):	Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

The information in this MSDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Valent U.S.A. Corporation to confirm if you have the most current MSDS.

Judgements as to the suitability of information herein for the individual's own use or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Valent extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

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