

Material Safety Data Sheet

Effective Date: 06-MAR-2005  
Product: HM-0335-A

I. IDENTIFICATION

Chemical Name: 2,4-D + Dicamba Herbicide  
Chemical Family: Phenoxy Herbicides  
Formula: Not applicable, formulated mixture.  
Synonyms: None  
CAS Number: Not applicable, formulated mixture.  
EPA Number: Experimental Use Product

II. PHYSICAL DATA

Boiling Point: >212 Degrees F.  
Freezing Point: <32 Degrees F.  
Spec Gravity: 1.176 gms/cc  
Vapor Pressure: Not determined  
Vapor Density: Not determined  
Solubility: Emulsifiable  
Volatiles: Not determined  
Evaporation: Not determined  
Melting Point: Not applicable  
Appearance: Amber liquid with phenoxy odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Dicamba	1918-00-9	18.65	N/E	Slight skin & severe eye irritant.
2,4-D Acid	94-75-7	24.87	N/E	Slight skin & severe eye irritant.
Proprietary blend of surfactants, emulsifiers and water.		56.48	N/E	Skin irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Not determined  
Autoignition Temp: Not determined  
Flammable Limit: Not determined  
Extinguishing Media: Foam, water spray, dry chemical and carbon dioxide.  
Special Fire Fight Proc: Wear self-contained breathing apparatus and full protective clothing. Contain and dispose of fire fighting waters.

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Fire and Expl Hazard: Under fire conditions, toxic and corrosive  
fumes are emitted.  
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V. HEALTH HAZARD  
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Carcinogen Information: Not listed by IARC, NTP or OSHA.

ACUTE EFFECTS OF OVER EXPOSURE  
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- Swallowing: Harmful if ingested. May cause nausea, vomiting, abdominal pain or decreased blood pressure. Aspiration of swallowed or vomited product can cause severe pulmonary complications.
- Skin Absorption: Harmful if absorbed through skin. May cause decreased blood pressure, muscle weakness and spasms.
- Inhalation: Harmful if inhaled. May cause muscle weakness, muscle spasms and decreased blood pressure.
- Skin contact: May cause skin irritation with repeated or prolonged contact.
- Eye Contact: Can cause corneal opacity and irreversible eye damage with contact. Vapors and mists may cause eye irritation.
- Chronic Effects: Prolonged contact can cause liver, kidney and chronic muscle damage.
- Other Hazard: None currently known.

EMERGENCY AND FIRST AID PROCEDURES  
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- Swallowing: Give 2 to 3 glasses of water to drink. Do not induce vomiting as this may cause aspiration. Seek medical attention immediately. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.
- Skin: Immediately wash skin with soap and water. Seek medical attention if irritation persists.
- Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If victim is not breathing, administer CPR. Seek immediate medical attention.
- Eyes: Immediately flush eyes with water for at least 15 minutes, holding eyelids open. Seek immediate medical attention, preferably with an ophthalmologist.
- Notes to Physician: There is no specific antidote for this mixture. All treatments should be based on observed signs and symptoms of distress in the

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patient. This product contains 2,4-D Acid, a phenoxy herbicide. Myotoxic effects may include muscle fibrillations, myotonia and muscular weakness. Ingestion of massive amounts may result in persistent lowered blood pressure. Myoglobin and hemoglobin may be found in the urine. Elevations of lactate dehydrogenase (LDH), SGOT, SGPT and aldolase indicate the extent of muscle damage. If large amounts have been ingested, the stomach should be evacuated by gastric intubation with the aid of a cuffed endotracheal tube to prevent exposure of the esophagus.  
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VI. REACTIVITY

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Stability: Stable  
Conditions to Avoid: Extreme heat, open flames, sparks or static electricity.  
Polymerization: Will Not Occur  
Conditions to Avoid: Not applicable  
Incompatibility material: Strong oxidizing agents.  
Hazardous Combustion: Hydrogen chloride and oxides of carbon may be produced under fire conditions.  
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VII. SPILL OR LEAK PROCEDURES

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Spill or Leak Proc: Contain spill using absorbent or impervious materials such as earth, sand or clay. Collect and place in plastic recovery drums for proper disposal. Do not get spilled product or cleanup materials in sewers, waterways, lakes, streams or ponds.  
Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.  
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VIII. SPECIAL PROTECTION INFORMATION

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Respiration: When respirators are required, select NIOSH-approved equipment based on actual or potential airborne concentrations.  
Ventilation: Local (mechanical) exhaust normally sufficient.  
Gloves: Impervious  
Eyes: Chemical workers' goggles.  
Other: Eyewash station, emergency shower, impervious  
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apron and footwear.  
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IX. SPECIAL PRECAUTIONS  
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Special precaution: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, or ponds.

Other precaution: Do not breathe vapors or mists. Avoid eye and skin contact. Do not ingest. Use handling, storage and disposal procedures to prevent contamination of water, food or feed. Store in an area away from ignition sources and oxidizing substances.

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X. SHIPPING INFORMATION  
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Shipping name: Not regulated by DOT in containers <41 gallons.  
Hazard Class: None  
Identification No: None  
Labels Required: None required  
Placarding: None  
Freight Class: Compound, Weed Killing, Liquid (2,4-D, Dicamba Herbicide), N.O.I. (NMFC Item 50320, Class 60)

Chemical Name	Equivalent R.Q.
2,4-D Acid (CAS No. 94-75-7)	100 lbs. (2.439 lbs./gallon)
Dicamba (CAS No. 1918-00-9)	1,000 lbs. (1.829 lbs./gallon)

TRANSPORTATION NOTE:

If container >= 41 gallons, ship as:  
RQ, Environmentally Hazardous Substance, Liquid, (2,4-D Acid), 9, UN3082,  
PG III "ERG # 171"

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XI. GENERAL PRODUCT INFORMATION  
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National Fire Protection Association Rating:  
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2                      Fire: 2                      Reactivity: 0

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S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y	Delayed (Chronic) Health: Y
Sudden Release of pressure: N	Fire: Y
Reactive: N	

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Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017  
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