

Material Safety Data Sheet

Effective Date: 13-DEC-2007  
Product: LATIGO

I. IDENTIFICATION

Chemical Name: 2,4-D Acid + Dicamba  
Chemical Family: Phenoxy Herbicide  
Formula: Not applicable, formulated mixture.  
Synonyms: None  
CAS Number: Not applicable, formulated mixture.  
EPA Number: 5905-564

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	18.28	N/E	Slight skin & severe eye irritant.
2,4-D Acid	94-75-7	24.62	N/E	Slight skin & severe eye irritant.
Proprietary blend of surfactants, emulsifiers and water.		57.10	N/E	Skin irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Not determined  
Autoignition Temp: Not determined  
Flammable Limit: Not determined  
Extinguishing Media: Use foam, water spray, dry chemical or carbon dioxide extinguishing agents.  
Special Fire Fight Proc: Wear self-contained breathing apparatus and full protective clothing. Contain and dispose

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of fire fighting water.  
Fire and Expl Hazard: Under fire conditions, toxic and corrosive  
fumes may be emitted.  
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V. HEALTH HAZARD

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Carcinogen Information: Not listed by IARC, NTP or OSHA.  
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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 skin contact.  
Eye Contact: Corneal opacity and irreversible eye damage can  
occur with direct eye 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.  
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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 immediate medical attention. To prevent  
aspiration of swallowed product, lay victim on  
side with head lower than waist.  
Skin: Immediately wash affected area 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, continuing  
for at least 15 minutes, while holding the  
eyelids apart. Seek immediate medical  
attention, preferably with an ophthalmologist.  
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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 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.

VI. REACTIVITY

Stability: Stable  
Conditions to Avoid: Avoid extreme heat, open flames, sparks or static electricity.  
Polymerization: Will Not Occur  
Conditions to Avoid: None currently known.  
Incompatibility material: Strong oxidizing agents.  
Hazardous Combustion: Hydrogen chloride and oxides of carbon may be produced under fire conditions.

VII. SPILL OR LEAK PROCEDURES

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 allow spilled product or cleanup materials to enter 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.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: When needed, select NIOSH-approved respirators based on actual or potential airborne concentrations.

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Ventilation: Local (mechanical) exhaust normally sufficient.  
Gloves: Impervious gloves.  
Eyes: Chemical workers' goggles.  
Other: Eyewash station, emergency shower, impervious apron and footwear.

IX. SPECIAL PRECAUTIONS

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.

X. SHIPPING INFORMATION

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

Chemical Name	Equivalent R.Q.
2,4-D Acid (CAS No. 94-75-7)	100 lbs. (2.4 lbs./gallon)
Dicamba (CAS No. 1918-00-9)	1,000 lbs. (1.8 lbs./gallon)

TRANSPORTATION NOTE:  
If container size > 41 gallons, ship as:  
RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Acid), 9, UN3082, PG III "ERG # 171"  
For tanker loads or capacity > 555 gallons, ship as:  
RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Acid, Dicamba), 9, UN3082, PG III "ERG # 171"

XI. GENERAL PRODUCT INFORMATION

Helena Chemical Company  
PH: 901-761-0050  
CHEMTREC: 800-424-9300

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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

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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responsibility. It is offered solely for your consideration, investigation  
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