



Safety Data Sheet

Report Date 26-Feb-16

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1. Identification

Product Name : HM-0452
Synonyms : None
Product Use : 2,4-D Acid and Dicamba Acid Herbicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Danger
Skin Irritation : Slight - Draize score is 1.6. Causes mild skin irritation.
Eye Irritation : Severely irritating - Draize score is 49.0. Causes serious eye irritation.
Acute Toxicity Oral : LD50 1,469 mg/kg. Harmful if swallowed.
Acute Toxicity Dermal : LD50 >5,000 mg/kg. May be harmful in contact with skin.

Hazard Categories : Oral/Dermal/Inhalation Toxicity-4/5/4; Eye/Skin Irritation-1/3

Hazard Statement : Harmful if swallowed
May be harmful in contact with skin
Causes serious eye damage
Causes mild skin irritation
Harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Dicamba (3,6-dichloro-o-methoxybenzoic acid)	1918-00-9	10.80
2,4-D Acid (2,4-dichlorophenoxyacetic acid)	94-75-7	24.16
Other ingredients	Proprietary	65.04

4. First Aid Measures

Eye : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

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.

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 a poison control center or doctor. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically.



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5. Fire Fighting Measures

- Extinguishing Media** : Use foam, water spray, dry chemical or carbon dioxide extinguishing agents.
- Specific Hazards Arising from the Chemical** : If water is used to fight fire, contain runoff to prevent contamination of water sources.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff of firefighting water.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area. Corrosive, causes irreversible eye damage. Harmful if inhaled.
- Protective Equipment** : Splashproof goggles or face shield, chemical-resistant gloves, long-sleeved shirt and long pants, shoes and socks. Emergency shower and eyewash should be available in work area. Use NIOSH-approved respirator for organic vapors when needed.
- Emergency Procedures** : Prevent material from entering any waterways or drains.
- Methods and Materials for Containment and Cleanup** : Collect free liquids and place in container for disposal. Impacted soils may require removal. Any recovered material must be placed in an appropriate container for disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Do not contaminate water, food, feed or feed by storage, handling or disposal. Keep container tightly closed when not in use.
- Conditions for Safe Storage** : Do not store below temperatures of 32 Degrees F. or above 100 Degrees F. Store in original container in a well-ventilated area, separately from fertilizer, food, feed and foodstuffs. Reduce stacking height where local conditions can affect package strength. Do not store under conditions that might adversely affect the container or its ability to function properly.

8. Exposure Controls / Personal Protection

- TLV/PEL** : 2,4-D acid - 10 mg/m³ (TLV).
- Appropriate Engineering Controls** : Use local exhaust ventilation.
- Personal Protective Equipment** : Splashproof goggles or face shield, chemical-resistant gloves, long-sleeved shirt and long pants, shoes and socks. Emergency shower and eyewash should be available in work area. Use NIOSH-approved respirator for organic vapors when needed.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear yellow to amber liquid; amine odor.
- Flash Point, °F** : >200 Degrees F.
- Boiling Point, °F** : Not specified
- Melting Point(Freezing point), °C** : Not specified
- Vapor Pressure, mm Hg @ 20 °C** : Not specified
- Vapor Density** : Not specified
- Solubility in Water** : Soluble
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.125 to 1.145
- Evaporation Rate(Butyl Acetate = 1)** : Not specified



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Octanol/Water Partition Coefficient : No information found
pH : 2.44 (1%)
Flammable Limits (approximate volume % in air) : Not applicable
Auto-ignition Temperature : Not applicable
Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No information found
Chemical Stability : Stable
Hazardous Decomposition Products : May produce hydrogen chloride, nitrogen oxides and carbon oxides under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid excessive heat. Do not store near heat or flame.
Incompatible Materials : Avoid strong oxidizing agents, bases and acids.

11. Toxicological Information

Acute Toxicity (Oral LD50) : 1,469 mg/kg (rat). Harmful if swallowed.
Acute Toxicity (Dermal LD50) : >5,000 mg/kg (rat). May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : >2.04 mg/L (male rat); 0.55 to 2.04 mg/L (female rat) - Aerosol form. Harmful if inhaled.
Likely Routes of Exposure : Ingestion, inhalation, eyes, skin
Skin Irritation : Slight skin irritation - Draize score is 1.6. Causes mild skin irritation.
Eye Irritation : Severely irritating - Draize score is 49.0. Causes serious eye irritation.
Skin Sensitization : Not listed as a skin sensitizer.
Carcinogenic : IARC lists chlorophenoxy herbicides in Group 2B (limited evidence for carcinogenicity in humans).
Chronic Effects : Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disorders.
Other Hazards : The USEPA has given the chlorophenoxy herbicide, 2,4-D, a Class D classification (not classifiable as to human carcinogenicity). More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects.

12. Ecological Information

Ecotoxicity : Toxic to fish and aquatic invertebrates.
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information



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UN Proper Shipping Name : Not regulated by DOT in containers less than 43 gallons; see Special Precautions below.

Transport Hazard Class : None

UN Identification Number : None

Packaging Group : None

Environmental Hazards : Reportable Quantity (RQ): Dicamba=1,000 lbs/>874 gallons; 2,4-D=100 lbs/>43 gallons.

Transport in Bulk : If shipped in single container >874 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (2,4-D Acid, Dicamba), 9, PG III "ERG # 171"

Special Precautions for Transportation : If shipped in single container >43 gallons <=874 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (2,4-D Acid), 9, PG III "ERG # 171"

Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

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

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

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 42750-144-5905

FIFRA Signal Word : Danger

FIFRA Label Statement : Corrosive. Causes irreversible eye damage.

FIFRA Label Statement : Harmful if inhaled.

FIFRA Label Statement : Harmful if swallowed.

FIFRA Label Statement : Do not get in eyes or on clothing.

FIFRA Label Statement : Avoid contact with skin.

FIFRA Label Statement : Avoid breathing spray mist.

FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 26-February-2016