



Safety Data Sheet

Report Date 21-Aug-15

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1. Identification

Product Name : OUTLAW
Synonyms : None
Product Use : Wide-spectrum 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 : Slightly irritating to the skin
Eye Irritation : Severely irritating at day 7.
Acute Toxicity Oral : LD50 >500 <2,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 >5,000 mg/kg (rat)

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

Hazard Statement : Harmful if swallowed
May be harmful in contact with skin
Causes serious eye damage
Causes mild skin irritation
Harmful if inhaled
May cause an allergic skin reaction
Combustible liquid

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Dicamba acid (3,6-dichloromethoxybenzoic acid)	1918-00-9	12.18
2-Ethylhexyl Ester of 2,4-Dichlorophenoxyacetic Acid	1928-43-4	24.28
Inert ingredients	Proprietary	63.54

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. Rinse mouth with water. Do not induce vomiting. 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.



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5. Fire Fighting Measures

- Extinguishing Media** : Use water spray, dry chemical or foam extinguishing agents.
Specific Hazards Arising from the Chemical : May produce hydrogen chloride and oxides of nitrogen under fire conditions.
Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing. Dike and collect water used to fight fire to prevent environmental damage.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
Emergency Procedures : Recover and contain as much free liquid as possible for reuse. Prevent spreading to any waterways, lakes, streams, ponds or drains.
Methods and Materials for Containment and Cleanup : Absorb small spills on sand, vermiculite or other inert absorbents. Collect and place in suitable containers for disposal. For large spills, dike spill area using absorbent or impervious materials. Allow absorbed material to solidify, then scrape up for disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.
Conditions for Safe Storage : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

- TLV/PEL** : 2,4-D Ethylhexyl Ester: TLV and PEL = 10 mg/m³ (for acid). Dicamba acid: no TLV or PEL established.
Appropriate Engineering Controls : Local mechanical exhaust may be required.
Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear amber liquid with phenoxy odor.
Flash Point, °F : 177 Degrees F.
Boiling Point, °F : Not determined
Melting Point(Freezing point), °C : <35 Degrees F.
Vapor Pressure, mm Hg @ 20 °C : No information found
Vapor Density : No information found
Solubility in Water : Soluble (emulsifies)
Molecular Formula : Not applicable, formulated mixture.
Density, g/mL @ 25 °C : 1.085-1.105
Evaporation Rate(Butyl Acetate = 1) : No information found



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Octanol/Water Partition Coefficient : No information found
pH : 2.3 to 3.2 (1%)
Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : Not established
Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No information found
Chemical Stability : Stable
Hazardous Decomposition Products : May release toxic gases such as hydrogen chloride under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid exposure to excessive heat.
Incompatible Materials : Avoid contact with oxidizing agents and acids.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >500 <2,000 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 : >2.01 mg/L. Harmful if inhaled.
Likely Routes of Exposure : Eyes, skin, inhalation, ingestion
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes serious eye damage.
Skin Sensitization : May cause an allergic skin reaction (contact sensitizer).
Carcinogenic : IARC lists chlorophenoxy herbicides in Group 2B (limited evidence for human carcinogenicity).
Chronic Effects : None currently known.
Other Hazards : USEPA has given the chlorophenoxy herbicides 2,4-D, 2,4-DP, MCPP and MCPA a Class D classification - not classifiable as to human carcinogenicity.

12. Ecological Information

Ecotoxicity : No information found
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : This product is toxic to some aquatic organisms and phytotoxic to some non-target terrestrial plant species.

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

UN Proper Shipping Name : Not regulated by DOT in containers <44 gallons.
Transport Hazard Class : None



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UN Identification Number : None
Packaging Group : None
Environmental Hazards : Reportable quantity = 100 lbs/44.287 gallons (2,4-D Ethylhexyl Ester (CAS No. 1928-43-4)); 1,000 lbs/917 gallons (Dicamba (CAS No. 1918-00-9))
Transport in Bulk : RQ, NA1993, Combustible Liquid, n.o.s., (2,4-D Ester, Aromatic Solvent), PG III "ERG # 128"
Special Precautions for Transportation : If single package \geq 44.287 gallons, ship as: RQ, NA1993, Combustible liquid, n.o.s. (2,4-D Ester, Aromatic Solvent), PG III "ERG # 128"
Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 3 Fire: 2 Reactivity: 1
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: Y
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 : 5905-574
FIFRA Signal Word : Danger
FIFRA Label Statement : Corrosive.
FIFRA Label Statement : Causes irreversible eye damage.
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 : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 21-August-2015