



(ND = Not Disclosed)

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CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB	Z	SARA 313
	phenoxyacetic acid (2,4-D)							
	OSHA PEL: 10 mg/m3							
	ACGIH TLV: 10 mg/m3							
	Other Limits: 10 mg/m3							
918009	3,6-Dichloro-	0.06%	N	N	N	N	N	N

o-anisic acid  
(Dicamba)

OSHA PEL: NI  
ACGIH TLV: NI  
Other Limits: NI  
OSHA PEL: NI  
ACGIH TLV: NI  
Other Limits: NI

6484778 R(+)-2(2-Methyl- 0.14% N N Y N N

4-chlorophenoxy)  
propionic acid  
(MCP)

OSHA PEL: NI  
ACGIH TLV: NI  
Other Limits: NI

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### 3. Hazardous Identification:

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Hazard Category:

Acute: X  
Chronic: X  
Fire:  
Pressure:  
Reactive:

Hazardous Identification Information: Granules; slight

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solvent like odor.

Irritant.

The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for carcinogenicity in humans.) The US EPA has

given the chlorophenoxy herbicides 2,4-D, 2,4-DP, MCP, and MCPA 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 and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen.

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#### 4. First Aid Measures:

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Route(s) of Entry: Contact, Inhalation, Ingestion.

Health Hazards (Acute and Chronic):

EYES: Contact may cause irritation.

SKIN: Nothing indicated.

INHALATION: May irritate respiratory tract.

INGESTION: May irritate gastrointestinal tract.

Signs and Symptoms: NI

Medical Conditions Generally Aggravated by Exposure: NI

Emergency First Aid Procedure:

If in eyes:

- 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.

If swallowed:

- 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 to an unconscious person.

If on skin or clothing:

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

If inhaled:

- 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 treatment

advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information in case of emergency, call toll free 1-877-800-5556.

Other Health Warnings:

Notes to physician: Treat symptomatically. Chlorophenoxy compounds are usually excreted in approximately 72 hours.

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5. Fire Fighting Measures:  
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Flash Point: NI

F.P. Method:

Upper Explosive Limit: NI

Lower Explosive Limit: NI

Fire Extinguishing Media: Foam, CO2, Dry chemical, water.

Unusual Fire and Explosion: Wear self-contained breathing apparatus and chemical-resistant gear.

Special Fire Fighting Procedures: Forms nitrogen oxides, sulphurous oxides and hydrogen chloride gas upon burning. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean

6. Accidental Release Measures:  
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Steps to be Taken in Case Material is Released or Spilled:

See Section 8 for Personal Protective Equipment. Collect spilled material for reuse if possible. If other than original container is used, label new container for this product. Collect unusable material into DOT drum for disposal. Wash area with water if possible.

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7. Handling and Storage:  
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Precautions to be Taken:

STORAGE: Keep in original container in a cool, dry area, away from extreme heat and direct sunlight. Do not store near food, feed, seeds or other pesticides.

Other Precautions: NI  
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8. Exposure Controls/Personal Protection:  
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Ventilation Requirements: Good general ventilation is required if product is not applied outdoors.

Personal Protective Equipment:

PROTECTIVE CLOTHING: Wear long sleeve shirt, long pants,

and shoes with socks.

EYE PROTECTION: Safety glasses with side shields or safety goggles.

RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

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#### 9. Physical and Chemical Properties:

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Boiling Point: NI

Melting Point: NI

Evaporation Rate (Butyl Acetate = 1): NI

Vapor Pressure (mm Hg.): NI

Vapor Density (Air = 1): NI

Solubility in Water: Insoluble.

Specific Gravity (H<sub>2</sub>O = 1): 0.79900

Appearance and Odor: Granules; slight solvent like odor.

Other Information:

pH (1% w/w H<sub>2</sub>O): 7.21

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#### 10. Stability and Reactivity:

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Stability: Stable.

Incompatibility (Materials to Avoid): None known.

Decomposition/By-Products: If burned, nitrogen oxides, sulfur dioxide and hydrogen chloride gas may be formed.

Hazardous Polymerization: Will not occur.

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#### 11. Toxicological Information:

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Acute Oral Toxicity/Rat: LD<sub>50</sub> >2,000 mg/kg

Acute Dermal Toxicity/Rabbit: LD<sub>50</sub> >2,000 mg/kg

Acute Inhalation/Rat: LC<sub>50</sub> > 2.07 mg/L

Primary Eye Irritation/Rabbit: Mild irritant

Primary Skin Irritation/Rabbit: Non-irritating

Dermal Sensitization: Not a contact sensitizer

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#### 12. Ecological Information:

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ENVIRONMENTAL HAZARDS: This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift or runoff from treated turf may adversely affect nontarget plants and aquatic organisms in adjacent aquatic sites.

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DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

high water mark. Do not apply when weather conditions favor drift from target area. Do not contaminate water when disposing of equipment washwaters.

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13. Disposal Considerations:

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If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partially filled: Call your local solid waste agency or toll free number (1-800-CLEANUP) for disposal instructions. Never place unused product down any indoor or outdoor drain. Dispose of DOT drum, waste water and any other waste according to local, state and Federal regulations.

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14. Transport Information:

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The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: Herbicides, NOI - NMFC #50320

In our current available sizes, this product does not qualify as a Hazardous Material.

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15. Regulatory Information:

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OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY: 15625 pounds of the formulation which contains 100 pounds of 2,4-D

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard, Delayed Health Hazard

SECTION 313 TOXIC CHEMICALS: 2,4-D CAS# 94-75-7, Dicamba CAS# 1918-00-9

RCRA STATUS: When discarded in its purchased form, this product is a listed RCRA hazardous waste and should be managed as a hazardous waste. (40 CFR Part 261.20-24)

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16. Other Information:

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REASON FOR ISSUE: New MSDS for an experimental formulation.

NOTE: NI means not indicated.  
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The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage, or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.

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