For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300.
For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: WEED WHACKER
Synonyms: Herbicide Mixture of 2,4-D, Mecoprop-p (MCPP-p) and Dichlorprop-p (2,4-DP-p)
EPA Reg. No.: 228-181-54705

Manufactured For: Lawn and Garden Products, Inc.
P.O. Box 35000
Fresno, CA 93745-5000
Phone – (559) 499-2100

Date of Issue: September 17, 2010 (NUF-May 24, 2006)
Sections Revised: All - new ANSI format

2. HAZARDS IDENTIFICATION

Emergency Overview:
Appearance and Odor: Amber colored liquid with an amine odor.
Warning Statements: Keep out of reach of children. WARNING. Causes substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes or on clothing. Avoid breathing spray mist and contact with skin.

Potential Health Effects:
Likely Routes of Exposure: Inhalation, eye and skin contact
Eye Contact: Causes substantial but temporary eye injury. May cause pain, redness and tearing.
Skin Contact: Slightly toxic and slightly irritating based on toxicity studies. Overexposure by skin absorption may cause symptoms similar to those for ingestion. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Ingestion: Harmful if swallowed. May cause nausea, vomiting, abdominal pain, decreased blood pressure, muscle weakness, muscle spasms.
Inhalation: Harmful if inhaled. May cause symptoms similar to those from ingestion.
Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:
This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid	2008-39-1	4.55
Dimethylamine Salt of (+)-R-2-(2-Methyl-4-Chlorophenoxy) propionic Acid	66423-09-4	2.30
Dimethylamine Salt of (+)-R-2-(2,4-Dichlorophenoxy) propionic Acid	104786-87-0	2.26
Inert Ingredients		90.89

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on 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.
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 further treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable due to aqueous formulation
Autoignition Temperature: Not determined **Flammability Limits:** Not determined

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.
Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.
Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:
Rating for this product: Health: 2 **Flammability:** 1 **Reactivity:** 0
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.
Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.
Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.
Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.
Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:
Do not get in eyes, on skin or on clothing. Avoid breathing spray mist and contact with skin. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. After using this product, wash non-disposable gloves thoroughly with soap and water before removing. Remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with

soap and water. Remove saturated clothing as soon as possible and shower. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

If the container is over one gallon and less than five gallons, then persons engaged in open pouring of the product must also wear coveralls or a chemical-resistant apron. If the container is five gallons or more in capacity, do not open pour product from the container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

Storage:
Always use original container to store pesticides in a secured warehouse or storage building and placed in an area inaccessible to children. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter the product. Containers should be opened in well-ventilated area. Keep container tightly sealed when not in use. Do not stack more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticides. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:
Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:
Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.
Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. When open pouring the product, also wear coveralls or a chemical-resistant apron. An emergency shower or water supply should be readily accessible to the work area.
Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.
General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

	OSHA		ACGIH		
Component	TWA	STEL	TWA	STEL	Unit
DMA Salt of 2,4-D	10*	NE	10*	NE	mg/m^3
DMA Salt of Mecoprop-p	NE	NE	NE	NE	
DMA Salt of Dichlorprop-p	NE	NE	NE	NE	

*Based on adopted limit for 2,4-D NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Amber colored liquid with an amine odor.

Boiling Point:	Not determined	**Solubility in Water:**	Soluble
Density:	8.5 pounds/gallon	**Specific Gravity:**	1.029 @ 20°C
Evaporation Rate:	Not determined	**Vapor Density:**	Not determined

Freezing Point:	32°F (0°C)	**Vapor Pressure:**	Not determined
pH:	7 - 8	**Viscosity:**	Not determined

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.
Conditions to Avoid: Excessive heat. Do not store near heat or flame.
Incompatible Materials: Strong oxidizing agents: bases and acids.
Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.
Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:
Except as noted, data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD_{50}: 1,800 mg/kg (female) and 2,300 mg/kg (male); FIFRA Category III
Dermal: Rabbit LD_{50}: >2,000 mg/kg; FIFRA Category III (data on this product)
Inhalation: Rat 4-hr LC_{50}: >0.5 thru 2 mg/l; FIFRA Category III
Eye Irritation: Rabbit: Severely irritating; FIFRA Category II (data on this product)
Skin Irritation: Rabbit: Slightly irritating; FIFRA Category IV
Skin Sensitization: Guinea Pigs: May cause dermal sensitization (data on this product).

Subchronic (Target Organ) Effects: Repeated overexposure may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.
Carcinogenicity / Chronic Health Effects: Prolonged overexposure can cause liver, kidney and muscle damage. The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, newer rat and mouse lifetime feeding studies as well as an MCPP lifetime feeding study in rats, did not show carcinogenic potential for 2,4-D, MCPP or dichlorprop/dichlorprop-p. The U.S. EPA has given 2,4-D a Class D classification (not classifiable as to human carcinogenicity).
Reproductive Toxicity: No impairment of reproductive function attributable to 2,4-D has been noted in laboratory animal studies. No impairment of reproductive function attributable to dichlorprop has been noted in laboratory animal studies.
Developmental Toxicity: Studies in laboratory animals with 2,4-D and MCPP have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Rat and rabbit studies on dichlorprop-p resulted in fetal mortality, decreased fetal body weight, decreased body weight gain and developmental delays at doses that were also toxic to mother animals. There was no evidence of birth defects in either species.
Genotoxicity: There have been some positive and some negative studies, but the weight of evidence is that neither 2,4-D nor MCPP is mutagenic. Genotoxicity studies on dichlorprop-p have been inconclusive with some positive and some negative results.

Assessment Carcinogenicity:
This product contains substances that are considered to be probable or suspected human carcinogens as follows:

	Regulatory Agency Listing As Carcinogen			
Component	**ACGIH**	**IARC**	**NTP**	**OSHA**
Chlorophenoxy Herbicides	No	2B	No	No

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on 2,4-D Dimethylamine Salt:

96-hour LC_{50} Bluegill:	524 mg/l	Bobwhite Quail Oral LD_{50}:	500 mg/kg
96-hour LC_{50} Rainbow Trout:	250 mg/l	Mallard Duck 8-day Dietary LC_{50}:	>5,620 ppm
48-hour EC_{50} Daphnia:	184 mg/l		

Data on Mecoprop-p:

96-hour LC_{50} Bluegill:	>100 mg/l (literature)
48-hour EC_{50} Daphnia:	>270 mg/l (literature)
72-hour EC_{50} Green Algae:	>270 mg/l (literature)

Data on Dichlorprop-p:

96-hour LC_{50} Bluegill:	100 mg/l	96-hour EC_{50} Algae:	676 mg/l
48-hour EC_{50} Daphnia Magna:	>100 mg/l	Bobwhite Quail Oral LD_{50}:	>2,000 mg/kg

Environmental Fate:

In laboratory and field studies, 2,4-D DMA salt rapidly dissociated to parent acid in the environment. The typical half-life of the resultant 2,4-D acid ranged from a few days to a few weeks. Mecoprop-p DMA rapidly dissociates to parent mecoprop-p in the environment. In soil, mecoprop-p is microbially degraded with a typical half-life of approximately 11 to 15 days. Dichlorprop-p DMA salt rapidly dissociates to parent dichlorprop-p in the environment. In soil, dichlorprop-p has a typical half-life of approximately 7 days.

13. DISPOSAL CONSIDERATIONS

If empty – Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled –** If product cannot be used as directed, call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (including sewer) drain.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

D.O.T. Not D.O.T. Regulated

Other Shipping Information: Compounds, Tree or Weed Killing (Herbicide)
NMFC Item 50320 Sub 2, LTL Class 60

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:
Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): Immediate, Delayed

Section 313 Toxic Chemical(s):
Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7), 3.8% equivalent by weight in product

Reportable Quantity (RQ) under U.S. CERCLA:
Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7) 100 pounds

RCRA Waste Code:
Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7) U240

State Information:
Other state regulations may apply. Check individual state requirements.
California Proposition 65: Not Listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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