



# The Importance of Understanding Herbicide Labels in Your Weed Management Program

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# Label Awareness

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- What is a label?
- What are the different labels, which one do I use?
- Products vs active ingredients
- The temptation posed by market segmentation
- Conclusion



# Pesticide Registration

- Company Actions
  - All present chemicals in proposed product
  - Data on potential risks to the environment and safe to human health including from food residual (if applicable)
  - Full label (use, storage, handling and warnings)
- EPA Actions
  - Review all material
  - Conduct Risk assessments and peer reviews of scientific data
  - Regulatory review





# What is the purpose of the Label?

Pesticide product labels provide critical information about how to safely and legally handle and use pesticide products. Unlike most other types of product labels, pesticide labels are legally enforceable, and all of them carry the statement: “It is a violation of Federal law to use this product in a manner inconsistent with its labeling.” In other words, the label is the law.



# What Label?

- Container Label/Supplemental Label
- Specimen Label
- Master Label

# Container Label

- Legal label
- Attached to the container
- Supplemental labels contain addendums to the container label



# Specimen Label/Web distributed

- Label not attached to the container
- Downloaded from internet
- Potential for missing/outdated information

## Specimen Label

# ELEMENT 4

### SPECIALTY HERBICIDE

<sup>®</sup>Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

For the control of woody plants and annual and perennial broadleaf weeds in non-crop industrial manufacturing and storage sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, forests and in the establishment and maintenance of wildlife openings. Use on these sites may include application to grazed areas.

Active Ingredient:  
triclopyr, 3,5,6-trichloro-2-  
pyridinyloxyacetic acid, butoxyethyl ester ..... 61.6%  
Other Ingredients ..... 38.4%  
Total ..... 100.0%  
Contains petroleum distillates  
Acid Equivalent: triclopyr - 44.3% - 4 lb/gal

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-40

EPA Est. \_\_\_\_\_

### CAUTION

Causes Moderate Eye Irritation • Harmful if Swallowed • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### Personal Protective Equipment (PPE)

Applicators and other handlers who handle this pesticide must wear:  
• Long-sleeved shirt and long pants  
• Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are given, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the WPS (40 CFR 170.240(g)(4)-(6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### User Safety Recommendations

Users should:  
• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.  
• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### First Aid

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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**Note to Physicians:** This product may pose an aspiration pneumonia hazard. Contains petroleum distillates.  
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to terrestrial areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### Physical or Chemical Hazards

Combustible. Do not use or store the product near heat or open flame.

#### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

#### Agricultural Use Requirements

The requirements in this box apply to forestry uses.

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

#### Non-Agricultural Use Requirements

The requirements in this box apply to all use sites on this label except for forestry uses.

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Entry Restrictions for Non-WPS Uses:** For applications to non-cropland areas, do not allow entry into areas until sprays have dried.

#### Storage and Disposal

Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited.

**Pesticide Storage:** Store above 26°F or agitate before use.  
**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Nonrefillable containers 5 gallons or less:**

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressurized rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

# Master Label

**EPA Registration Number:** 62719-519  
**Company Name:** CORTEVA AGRISCIENCE LLC  
**Address:** 9330 ZIONSVILLE ROAD  
**City, State Zip:** INDIANAPOLIS, IN 46268  
**First Registered Date:** AUGUST 10, 2005  
**Current Status (Date):** Registered (AUGUST 10, 2005)  
**Restricted Use:** NO

Labels SLN/24(c) Chemical Alt Brand Name Inactive Alt Brand Name Transfer History Site

Pest

EPA Reg. No.	Product Name	Accepted Date
62719-519	MILESTONE	<a href="#">February 04, 2021 (PDF)</a>
62719-519	MILESTONE	<a href="#">June 02, 2020 (PDF)</a>
62719-519	MILESTONE	<a href="#">March 24, 2020 (PDF)</a>
62719-519	MILESTONE	<a href="#">May 05, 2017 (PDF)</a>
62719-519	MILESTONE	<a href="#">January 30, 2017 (PDF)</a>
62719-519	MILESTONE	<a href="#">April 15, 2014 (PDF)</a>
62719-519	MILESTONE	<a href="#">October 12, 2012 (PDF)</a>
62719-519	MILESTONE	<a href="#">May 26, 2011 (PDF)</a>
62719-519	MILESTONE	<a href="#">August 26, 2010 (PDF)</a>
62719-519	MILESTONE	<a href="#">May 26, 2010 (PDF)</a>
62719-519	MILESTONE	<a href="#">March 31, 2010 (PDF)</a>
62719-519	MILESTONE	<a href="#">November 19, 2009 (PDF)</a>
62719-519	MILESTONE	<a href="#">December 27, 2007 (PDF)</a>
62719-519	MILESTONE	<a href="#">May 18, 2007 (PDF)</a>
62719-519	MILESTONE	<a href="#">April 04, 2007 (PDF)</a>

- Found on the EPA’s “Pesticide Product Label System (PPLS)” website
- Contains all relevant information for the product
- Combination of actions take by the company and by EPA



A green and black utility vehicle with a white tank is parked in a grassy field. The background features a dense forest of evergreen trees and a rocky mountain range under a clear blue sky.

# The big question

Which label is the legal label with regard to pesticide applications?



# Active Ingredient vs Product

The Potential For Trouble



# Active Ingredient

Biologically active ingredient

Does not refer to a specific labeled  
product

# Formulated Product

- The formulation of the active ingredient with inert ingredients to create a pesticide
- Does refer to a specifically labeled product



A photograph of a rustic wooden barn with a red roof, situated in a lush green field. In the background, there are rolling hills or mountains under a cloudy sky. The foreground is filled with various green plants and shrubs.

Active Ingredients  $\neq$  Products



# Avoid the Temptation of Market Segmentation

- Manufacturers tailoring an herbicide product to a specific user group
- We all use pesticides but for different reasons
- Products are labeled and marketed specifically for those reasons

# Clear Cast by BASF

SPECIMEN Group 2 Herbicide

## Clearcast®

### Herbicide

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For the control of vegetation in and around aquatic and noncropland sites including areas that may be grazed or cut for hay

**Active Ingredient:**  
 ammonium salt of imazamox 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid\* ..... 12.1%

**Other Ingredients:** ..... 87.9%

**Total:** ..... 100.0%

\*Equivalent to 11.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid  
 1 gallon contains 1.0 pound of active ingredient as the free acid.

EPA Reg. No. 241-437 EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN  
 CAUTION/PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
 (If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Flush skin thoroughly with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and flush slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**HOTLINE NUMBER**  
 (Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of an emergency undergoing fire or property involving this product, call 1-800-Corporation for emergency medical treatment information, day or night. 1-800-832-1117 (KCS-7).)

See inside for complete Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

**Net Contents:**

BASF Corporation  
 26 Davis Drive  
 Research Triangle Park, NC 27709

**BASF**  
We create chemistry

# Raptor by BASF

## Raptor<sup>®</sup>

### Herbicide

For use on alfalfa, beans (dry), chicory, clover grown for seed, edamame, lima bean (succulent), peas (dry), pea (English), snap bean, and soybean

**Active Ingredient:**

ammonium salt of imazamox: 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid\* . . . . . 12.1%

**Other Ingredients:** . . . . . 87.9%

**Total:** . . . . . 100.0%

\*Equivalent to 11.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid  
1 gallon contains 1.0 pound of active ingredient as the free acid.

EPA Reg. No. 241-379

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION/PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See full label for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

**In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).**

**Net Contents:**

BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709



# Side by Side Comparison

	<b>Clearcast</b>	<b>Raptor</b>
Manufacturer	BASF	BASF
Active	Salt of Imazamox	Salt of Imazamox
Percent Active	12.1%	12.1%
Use site	Aquatic	Bean crops
Cost	287.00	547.00

# Conclusion

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- The label exists to ensure the health and safety of people and the environment
- The label carries the full weight of the law.
- Know the label, know the product
- If you don't know, ask!

