

62719-303

06/20/2008

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U.S. ENVIRONMENTAL PROTECTION
AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg.

Number:

62719-303

Date of Issuance:

20 JUN 2008

NOTICE OF PESTICIDE:

☐ Registration
☒ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:

IPA-4

Name and Address of Registrant (include ZIP Code):

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(6)(2)(C) provided you agree in writing to:

1. Per the acute toxicity review, the following "IF INHALED" text must be added to the First Aid section of the label and be placed below the "IF SWALLOWED" statements"

"IF INHALED:

Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice."

2. As specified in the acute toxicity review, a phone number for emergency medical treatment information should be added to the label.
3. Per the acute toxicity review, the text in bold type must be added to the Hazards to Humans and Domestic Animals text currently on the label:

"DANGER

Corrosive. Causes irreversible eye damage. May be fatal if absorbed through skin. Harmful if swallowed. **Harmful if inhaled.** Do not get in eyes, on skin, or on clothing. **Avoid breathing vapor or spray mist."**

Signature of Approving Official:

Joanne I. Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

Date:

20 JUN 2008

4. Per the RED and the acute toxicity review, the PPE section must be revised to read:

"Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

All pilots must wear:
Long sleeved shirt,
Long pants, and
Shoes and socks.

All mixers, loaders, flaggers and other applicators and handlers must wear:
Coveralls over short sleeved shirt and short pants,
Chemical-resistant footwear plus socks,
Chemical-resistant gloves,
Goggles or face shield,
Chemical-resistant headgear for overhead exposure, and
A chemical-resistant apron when mixing, loading or cleaning equipment.

See engineering controls for additional requirements."

5. Because coveralls are now required for most handlers, the Agency recommends that the following User Safety Requirements text be added to the label:

"Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them."

6. The text in bold type must be added to the User Safety Recommendation text currently on the label:

"User should remove clothing/**PPE** immediately if pesticide gets inside."

7. The text "except as noted on appropriate labels" should be deleted from the text "Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels" currently appearing in the Environmental Hazard section of the label.

8. Per Page 117 of the 2,4-D, the early entry PPE may be reduced and may be revised to read:

"Coveralls,
Chemical-resistant gloves made of any waterproof material,
Shoes plus socks,
Protective eyewear."

9. Reference to chemigation should be deleted from the first sentence of the spray drift section because the label states "do not apply this product through any type of irrigation system."
10. The following revisions must be made to the Directions for Use:

Orchard Floors:

The text currently on the label "Nut Orchards, Pistachios: Allow at least 30 days between applications" must be revised to read:

"Pistachio: The retreatment interval is 60 days.

Filberts: The retreatment interval is 30 days.

Other tree nuts: The retreatment interval is 30 days."

Forestry:

Per the RED, add "Do not apply more than one application per year" to the directions for broadcast, basal/cut surface and injection uses.

Non-CRP Pasture and Rangeland:

The heading "CRP Pasture and Rangeland" should be added to the use directions currently on Pages 34 – 35 of the label. The text below must be added to the label for non-CRP pasture and rangeland as specified on Page 142 of the label table and Appendix A of the 2,4-D RED. Any conflicting text must be revised.

"For Non-CRP Pasture and Rangeland

For susceptible annual and biennial broadleaf weeds: Do not use more than 1.0 lbs ae per acre per application.

For moderately susceptible biennial and perennial broadleaf weeds and difficult to control weeds and woody plants: Do not use more than 2.0 lbs ae per acre per application.

For spot treatment, do not apply more than 2.0 lbs ae per acre.

Do not apply more than 2 applications per year.

The maximum seasonal application rate is 4.0 lbs ae per acre.

The minimum retreatment interval is 30 days."

Non-Cropland Areas:

For annual and perennial weeds - Add "The minimum retreatment interval is 30 days."

11. Change "To the extent permitted by law" to read "To the extent consistent with applicable law", wherever it appears under the terms and conditions of use.
12. In the Ornamental Turfgrass section, add the following: Intended for use by applicators who are authorized/licensed by the state for this type of application.
13. On page 19, delete the phrase "General Use". This is an implied safety claim.

14. Add the following statements to the labeling: Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to EPA Web Site:
<http://www.epa.gov/espp>.

Submit one copy of the revised final printed label for the record before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

(Base label for rigid containers 5 gal or less):

IPA-4

Herbicide

Contains Isopropylamine Salt of 2,4-D

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Active Ingredient:

2,4-Dichlorophenoxyacetic acid,
isopropylamine salt.....49.5%

~~Inert~~ Other Ingredients.....50.5%

Total Ingredients.....100.0%

2,4-dichlorophenoxyacetic acid[†] - 39.1% - 3.8 lb/gal

[†]Isomer Specific by AOAC Method No. 978.05 (15th Edition)

ACCEPTED
with COMMENTS
In EPA Letter Dated:

20 JUN 2008

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

Keep Out of Reach of Children

DANGER PELIGRO

62719-303

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

Precautionary Statements

Hazards to Humans and Domestic Animals

Corrosive • Causes Irreversible Eye Damage • May Be Fatal If Absorbed Through Skin • Harmful If Swallowed

Do not get in eyes, on skin, or on clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selections chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- ~~Waterproof gloves~~
- Chemical-resistant gloves, when applying postharvest dips or sprays to citrus, applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles or face shield)

- ~~Chemical-resistant apron when cleaning equipment, mixing, or loading~~
- Chemical resistant apron when applying postharvest dips or sprays to citrus, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate
- Chemical-resistant headgear for overhead exposure

See engineering controls for additional requirements

~~Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.~~

Engineering Controls Statements

~~For containers of 5 gallons or more: A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4)], the handler PPE requirements may be reduced or modified as specified in the WPS.~~

When handlers use closed systems or enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 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 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Environmental Hazards

This product is toxic to aquatic invertebrates and may be toxic to fish. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal area below the mean high water mark except as noted on appropriate labels.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters.

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. Application around a cistern or well may result in contamination of drinking water or groundwater.

Mixing and Loading: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

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

Triple rinse or pressure 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 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.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read "Warranty Disclaimer," "Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-303

EPA Est. _____

Produced for Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Herbicide

Net Contents __ gal

9/43

(Base label for refillable rigid containers larger than 5 gal):

IPA-4

Herbicide

Contains Isopropylamine Salt of 2,4-D

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Active Ingredient:

2,4-Dichlorophenoxyacetic acid, isopropylamine salt.....	49.5%
Inert Other Ingredients.....	50.5%
Total Ingredients.....	100.0%

2,4-dichlorophenoxyacetic acid[†] - 39.1% - 3.8 lb/gal

~~[†]Isomer Specific by AOAC Method No. 978.05 (15th Edition)~~

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DANGER PELIGRO

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Precautionary Statements

Hazards to Humans and Domestic Animals

Corrosive • Causes Irreversible Eye Damage • May Be Fatal If Absorbed Through Skin • Harmful If Swallowed

Do not get in eyes, on skin, or on clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selections chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- ~~Waterproof gloves~~
- Chemical-resistant gloves, when applying postharvest dips or sprays to citrus, applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles or face shield)

10/43

- ~~Chemical resistant apron when cleaning equipment, mixing, or loading~~
- Chemical resistant apron when applying postharvest dips or sprays to citrus, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate
- Chemical-resistant headgear for overhead exposure

See engineering controls for additional requirements

~~Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.~~

Engineering Controls Statements

~~For containers of 5 gallons or more: A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4)], the handler PPE requirements may be reduced or modified as specified in the WPS.~~

When handlers use closed systems or enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 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 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Environmental Hazards

This product is toxic to aquatic invertebrates and may be toxic to fish. ~~Drift or runoff may adversely affect aquatic invertebrates and non-target plants.~~ Do not apply directly to water, to areas where surface water is present, or to intertidal area below the mean high water mark except as noted on appropriate labels.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters.

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. Application around a cistern or well may result in contamination of drinking water or groundwater.

Mixing and Loading: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

Container Reuse: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read "Warranty Disclaimer," "Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.**

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EPA Est. _____

Produced for Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Herbicide

Net Contents __ gal

(Base label for nonrefillable rigid containers larger than 5 gal):

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Active Ingredient:

2,4-Dichlorophenoxyacetic acid, isopropylamine salt.....	49.5%
Inert Other Ingredients.....	50.5%
Total Ingredients	100.0%

2,4-dichlorophenoxyacetic acid[†] - 39.1% - 3.8 lb/gal

[†]Isomer Specific by AOAC Method No. 978.05 (15th Edition)

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Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selections chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- ~~Waterproof gloves~~
- Chemical-resistant gloves, when applying postharvest dips or sprays to citrus, applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles or face shield)

14/43

- ~~Chemical-resistant apron when cleaning equipment, mixing, or loading~~
- Chemical resistant apron when applying postharvest dips or sprays to citrus, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate
- Chemical-resistant headgear for overhead exposure

See engineering controls for additional requirements

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Engineering Controls Statements

~~For containers of 5 gallons or more: A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4)], the handler PPE requirements may be reduced or modified as specified in the WPS.~~

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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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 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 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Environmental Hazards

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15/43

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters.

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Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

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

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. 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 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.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read "Warranty Disclaimer," "Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.**

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EPA Reg. No. 62719-303

EPA Est. _____

16/43

Produced for Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Herbicide

Net Contents __ gal

17/43

(cover):

IPA-4

Herbicide

Contains Isopropylamine Salt of 2,4-D†

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Active Ingredient:

2,4-Dichlorophenoxyacetic acid, isopropylamine salt.....	49.5%
Inert Other Ingredients.....	50.5%
Total Ingredients.....	100.0%

2,4-dichlorophenoxyacetic acid† - 39.1% - 3.8 lb/gal

—† Isomer Specific by AOAC Method No. 978.05 (15th Edition)

Keep Out of Reach of Children

DANGER PELIGRO

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

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read "Warranty Disclaimer," "Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-303

EPA Est. _____

18/43

Produced for Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Herbicide

Net Contents __ gal

[Page 1 through end]:

Table of Contents	Page
Precautionary Statements	
— Hazards to Humans and Domestic Animals	
— Personal Protective Equipment	
— Engineering Controls Statements	
— User Safety Recommendations	
— First Aid	
— Environmental Hazards	
Directions for Use	
— Agricultural Use Requirements	
— Non-Agricultural Use Requirements	
— Storage and Disposal	
General Information	
— General Use Precautions and Restrictions	
— Avoiding Injury to Non-target Plants	
— Spray Drift Precautions	
— Spray Drift Management (Aerial Application)	
— Aerial Drift Reduction Advisory	
— Mixing Instructions	
— Application Instructions	
— Weeds Controlled	
Crop Uses	
— Cereal Grains (Wheat, Barley, Millet, Rye, Oats)	
— Conservation Reserve Program Acres (See Rangeland and Permanent Grass Pastures)	
— Corn (Field Corn, Popcorn and Sweet Corn)	
— Fallowland and Crop Stubble	
— Field Corn (See Corn)	
— Orchard Floors (Pome Fruit such as Apples and Pears, Stone Fruit, Nut Orchards and Pistachios)	
— Sorghum (Grain Sorghum (Milo) and Forage Sorghum)	
— Soybeans (Preplant Only)	
Forestry, Rangeland, Established Pastures, and Non-cropland Uses	
— Forests	
— Rangeland, and Established Grass Pastures (Including Perennial Grasslands not in Agricultural Production Such as Conservation Reserve Program Acres)	
— Non-cropland	
Turf Uses	
— Grasses Grown for Seed or Sod	
— Ornamental Turf	
Terms and Conditions of Use	
Warranty Disclaimer	
Inherent Risks of Use	
Limitation of Remedies	

(Page 1 through end):

Precautionary Statements

Hazards to Humans and Domestic Animals

DANGER

Corrosive • Causes Irreversible Eye Damage • May Be Fatal If Absorbed Through Skin • Harmful If Swallowed

Do not get in eyes, on skin, or on clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selections chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- ~~Waterproof gloves~~
- Chemical-resistant gloves, when applying postharvest dips or sprays to citrus, applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles or face shield)
- ~~Chemical resistant apron when cleaning equipment, mixing, or loading~~
- Chemical resistant apron when applying postharvest dips or sprays to citrus, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate
- Chemical-resistant headgear for overhead exposure

See engineering controls for additional requirements

~~Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.~~

Engineering Controls Statements

~~For containers of 5 gallons or more: A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4)], the handler PPE requirements may be reduced or modified as specified in the WPS.~~

~~When handlers use closed systems or enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.~~

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 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 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Environmental Hazards

This product is toxic to aquatic invertebrates and may be toxic to fish. ~~Drift or runoff may adversely affect aquatic invertebrates and non-target plants.~~ Do not apply directly to water, to areas where surface water is present, or to intertidal area below the mean high water mark except as noted on appropriate labels. ~~Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.~~ Do not contaminate water when disposing of equipment washwaters.

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. Application around a cistern or well may result in contamination of drinking water or groundwater.

~~**Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.~~

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

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

22/43

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 48 hours.

PPE required for early entry to 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 over short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material ~~Waterproof gloves~~
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

Non-Agricultural Use Requirements

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.

Use Requirements for Rangeland, Pasture, Tree Injection Use in Forests, and Non-cropland Areas

Restricted Entry Interval: Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

~~No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is applied to rangeland, pasture, tree injection use in forests, or non-cropland areas.~~

Restricted Entry Interval: When used on grass seed crops, follow PPE and reentry instructions in the "Agricultural Use Requirements" section of this label. For use on other turf areas, do not enter or allow people (other than applicator) (or pets) on to enter the treated treatment area during application. ~~Do not enter into treated areas until sprays have dried.~~

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

Nonrefillable containers 5 gallons or less:

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

Triple rinse or pressure 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 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.

Refillable containers larger than 5 gallons:

Container Reuse: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container.

Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal,

23/43

empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Nonrefillable containers larger than 5 gallons:

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

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. 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 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.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal (Metal): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (Plastic containers 5 gals or less): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by local authorities, by burning. If burned stay out of smoke.

General: Consult federal, state, or local disposal authorities for approved alternative procedures.

General Information

IPA-4 herbicide is intended for selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Apply IPA-4 as a water or oil-water spray during warm weather when target weeds or woody plants are actively growing. Application under drought conditions will often give poor results. Use low spray pressure and coarse sprays to minimize drift. Generally, the lower dosages recommended on this label will be satisfactory for young, succulent growth of susceptible weed species. For less susceptible species and under conditions where control is more difficult, use higher recommended rates. Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for satisfactory control. Consult your State Agricultural Experiment stations or Extension Service Weed Specialists for recommendations from this label that best fit local conditions.

General Use Precautions and Restrictions

Be sure that use of this product conforms to all application regulations.

Chemigation: Do not apply this product through any type of irrigation system.

Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination and plant growth.

Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, fruit trees, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that may not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Aerial Application

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

25/43

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Ground Boom Application

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Avoiding Injury to Non-target Plants

Spray drift produced during application is the responsibility of the applicator and care should be taken to minimize off-target movement of spray during application. A drift control agent suitable for agricultural use may be used with this product to aid in reducing spray drift. If used, follow all use recommendations and precautions on the product label.

Do not apply where drift may be a problem due to proximity to susceptible crops or other desirable broadleaf plants. Do not apply IPA 4 directly to, or otherwise permit contact with cotton, flowers, fruit trees, grapes, ornamentals, vegetables, or other desirable plants, which are susceptible to 2,4-D herbicides. Do not permit spray mist containing 2,4-D to contact susceptible plants since even very small quantities of the spray, which may not be visible, can cause severe injury during both active growth and dormant periods. Do not use in greenhouses.

Ground Equipment: With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by using no more than 20 pounds spraying pressure and large droplet producing nozzle tips; by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 10 miles per hour. Do not apply with hollow cone type insecticide or other nozzles that produce a fine droplet spray.

Avoid Movement of Treated Soil: Avoid conditions under which soil from treated areas may be moved or blown to areas containing susceptible plants. Wind-blown dust containing 2,4-D may produce visible symptoms when deposited on susceptible plants, however, serious plant injury is unlikely. To minimize potential movement of 2,4-D on wind-blown dust, avoid treatment of powdery dry or light sandy soils until soil is settled by rainfall or irrigation or irrigate soon after application.

Do not store or handle other agricultural chemicals with the same containers used for IPA-4. Do not apply other agricultural chemicals or pesticides with equipment used to apply IPA-4 unless equipment has been thoroughly cleaned to remove all traces of 2,4-D.

Spray Drift Management (Aerial Application)

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

26/43

In certain states, additional regulations may be applicable to aerial application of this product.

The applicator should be familiar with and take into account the information covered in the following Aerial Drift Reduction Advisory Information section.

Aerial Spray Drift Advisory Information

Importance of Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversion section of this label).

Controlling Droplet Size:

- **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a low level temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in

27/43

a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Mixing Instructions

Mix IPA-4 only with water, unless otherwise directed on this label. Add about half the water to the mixing tank, then add the IPA-4 with agitation, and finally the rest of the water with continuing agitation.

Note: Adding oil, wetting agent, or other surfactant to the spray mixture may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates. Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Mixing with Liquid Nitrogen Fertilizer

This product may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish broadleaf weed control and fertilization of corn, small grains or pastures in a single operation. Use IPA-4 in accordance with recommendations for these crops provided in this label. Use liquid fertilizer at rates recommended by the supplier or Extension Service Specialist. Test for mixing compatibility as describe above before mixing in spray tank. A compatibility aid such as Unite or Compex may be needed in some situations. Compatibility is best with liquid fertilizer solutions containing only nitrogen. Mixing with N-P-K solutions may not be satisfactory, even with the addition of a compatibility aid. Pre-mixing 1 part IPA-4 with up to 4 parts water may help in situations when mixing difficulty occurs.

Fill the tank about half full with the liquid fertilizer, then add the required amount of IPA-4 with agitation.. Maintain agitation and complete filling the tank with liquid fertilizer. Apply immediately and continue agitation in spray tank during application. **Do not store the spray mixture.** Application during very cold weather (near freezing) is not advisable.

Sprayer Clean-Out

To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned before re-use or applying other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of all rinse water by application to treatment area or apply to non-cropland area away from water supplies.
2. During the second rinse, add 1 qt of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.

5. Remove nozzles and screens and clean separately.
6. If equipment is to be used to apply another pesticide or agricultural chemical to a 2,4-D susceptible crop, additional steps may be required to remove all traces of 2,4-D, including cleaning of disassembled parts and replacement of hoses or other fittings that may contain absorbed 2,4-D.

Application Instructions

Spray Volume: Apply with calibrated air or ground equipment using sufficient spray volume to provide adequate coverage of target weeds or as otherwise directed in specific use directions. For broadcast application, use a spray volume of 3 or more gallons per acre by air and 10 or more gallons per acre for ground equipment. Where states have regulations, which specify minimum spray volumes, they should be observed. In general, spray volume should be increased as crop canopy, height and weed density increase in order to obtain adequate spray coverage. **Do not apply less than 3 gallons total spray volume per acre.**

Application Rates: Generally, lower rates in recommended rate ranges will be satisfactory for more sensitive weeds species, when weeds are small, and when environmental conditions are favorable for rapid growth. Use higher rates in the recommended rate range for less sensitive species and under less favorable growing conditions. For crop uses, do not mix with oil or other adjuvants unless specifically recommended on this label. Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for effective control.

Spot Treatments

To prevent misapplication, spot treatments should be applied with a calibrated boom or with hand-held sprayers using a fixed spray volume per 1,000 sq ft as indicated below.

Hand-Held Sprayers: Hand-held sprayers may be used for spot applications of IPA-4. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on the application rate for an area of 1,000 sq ft. Mix the amount of IPA-4 (fl oz or ml) corresponding to the desired broadcast rate in one (1) or more gallons of spray. To calculate the amount of IPA-4 IVM required for larger areas, multiply the table value (fl oz or ml) by the thousands of sq ft to be treated. An area of 1000 sq ft is approximately 10.5 X 10.5 yards (strides) in size.

Rate Conversion Table for Spot Treatment:

Label Broadcast Rate (pt/acre)							
1/2	2/3	3/4	1	2	3	4	8
Equivalent Amount of IPA-4 per 1000 sq ft							
1/5 fl oz [†] (5.5 ml)	1/4 fl oz (7.3 ml)	1/3 fl oz (8.3 ml)	3/8 fl oz (11 ml)	3/4 fl oz (22 ml)	1 fl oz (33 ml)	1 1/2 fl oz (44 ml)	3 fl oz (88 ml)

[†]Conversion factors: 1 fl oz = 29.6 (30) ml

Band Application: IPA-4 may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

Band width in inches

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast rate per acre} = \text{Band rate per treated acre}$$

Band width in inches

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast volume per acre} = \text{Band volume per treated acre}$$

29/43

Weeds Controlled

Annual or Biennial Weeds

Beggarticks ⁽¹⁾	mousetail ⁽²⁾
Bittercress, smallflowered ⁽²⁾	mustards (except blue mustard)
bitterweed	parsnip, wild
broomweed, common ⁽¹⁾	pennycress (fanweed)
burdock, common	pepperweeds (<i>Lepidium</i> spp.) ^{(1) (2)}
buttercup, smallflowered ^{(1) (2)}	pigweeds (<i>Amaranthus</i> spp.) ⁽¹⁾
carpetweed	poorjoe
cinqfoil, common ⁽²⁾	primrose, common
cinqfoil, rough ⁽²⁾	purslane, common ⁽²⁾
cocklebur, common	pusley, Florida
coffeeweed	radish, wild
copperleaf, Virginia ⁽²⁾	ragweed, common
croton, Texas	ragweed, giant
croton, woolly	rape, wild
flixweed	rocket, yellow
galinsoga	salsify, common ⁽¹⁾
geranium, Carolina ⁽²⁾	salsify, western ⁽¹⁾
hemp, wild	shepherdspurse
horseweed (marestail) ⁽²⁾	sicklepod
jewelweed	smartweed (annual species) ^{(1) (2)}
jimsonweed	sneezeweed, bitter
knotweed ⁽¹⁾	sowthistle, annual
kochia	sowthistle, spiny
lambsquarters, common	spanishneedles
lettuce, prickly ^{(1) (2)}	sunflower
lettuce, wild	sweetclover
lupines	tansymustard
mallow, little ⁽¹⁾	thistle, bull
mallow, Venice ⁽¹⁾	thistle, musk ⁽¹⁾
marshelder	thistle, Russian (tumbleweed) ⁽¹⁾
morningglory, annual	velvetleaf
morningglory, ivy	vetches
morningglory, woolly	

Perennial Weeds

Alfalfa ^{(1), (2)}	eveningprimrose, cutleaf ⁽²⁾
artichoke, Jerusalem ⁽¹⁾	garlic, wild ⁽¹⁾
aster, many-flower ⁽¹⁾	hawkweed, orange ⁽¹⁾
Austrian fieldcress ⁽¹⁾	healal
bindweed (hedge, field and European) ^{(1) (2)}	ironweed, western ⁽²⁾
blue lettuce	ivy, ground ⁽¹⁾
blueweed, Texas	Jerusalem-artichoke
broomweed	loco, bigbend
bullnettle ^{(1) (2)}	nettles (including stinging) ⁽¹⁾
carrot, wild ⁽¹⁾	onion, wild ⁽¹⁾
catnip	pennywort
chicory	plantains
clover, red ^{(1) (2)}	ragwort, tansy ⁽¹⁾
	sowthistle, perennial

coffeeweed
 cress, hoary ⁽¹⁾
 dandelion ⁽¹⁾
 docks ⁽¹⁾
 dogbanes ⁽¹⁾
 goldenrod

thistle, Canada ^{(1) (2)}
 vervains ⁽¹⁾
 wormwood

⁽¹⁾ These weeds are only partially controlled and may require repeat applications and/or use of higher recommended rates of this product even under ideal conditions of application.

⁽²⁾ This product may not be used to control this weed species in the state of California.

Crop Uses

Agricultural Use Requirements for Crops: For the following crop uses, follow PPE and Re-entry instructions in the "Agricultural Use Requirements" section of this label.

Cereal Grains (Wheat, Barley Millet, Oats, and Rye) (Not Underseeded with Legumes)

Crop/Application Timing	IPA-4 (pt/acre)	Specific Use Directions
Spring post-emergence (wheat, barley, millet, rye) (oats)	2/3 - 1 1/3 1/2 - 1	General: Apply when weeds are small and actively growing. Use the lower rate in the rate range for small rapidly growing annual or biennial weeds and a higher rate for perennial weeds or for annual or biennial weeds in advanced growth stages or when growing conditions are less than ideal. Postemergence: Apply after crop <u>is fully begins to tillered, but before boot stage of growth</u> (usually 4 to 8 inches tall) <u>but not forming joints in the stem</u> . Preharvest: Apply using air or ground equipment when crop is in dough stage of grain development to control or suppress weeds that might interfere with harvest.
Pre-harvest (dough stage) (all cereals)	1	

Precautions:

- Up to 2.5 pt/acre may be applied postemergence to wheat, barley, rye and millet. However, there is greater risk of crop injury at rates greater than 1 1/3 pt/acre and such rates should be used only when the need for weed control justifies additional risk to the crop.
- Do not apply IPA-4 at the crop seedling stage of growth prior to tillering or from early boot (forming joints in the stem) through milk stage of grain development.** Consult state agricultural experiment station or extension service weed specialists for recommendations or suggestions to fit local conditions.
- Do not apply if crop is underseeded with legumes.

Restrictions:

- Grazing and Haying Restrictions:** Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 14 days after treatment. **Preharvest Interval:** Do not harvest for hay or harvest grain within 14 days after application.
- Do not apply more than 3.685 pt/acre (1.75 lb of acid equivalent) of IPA-4 per use season.

- Do not make more than one post-emergence application and one pre-harvest application per crop season.

Corn (Field Corn, Popcorn and Sweet Corn)

Application Timing/ Stage of Growth	IPA-4 (pt/acre)	Specific Use Directions
Preplant (Burndown) Preemergence (Field corn, popcorn, and sweet corn)	1 to 2	General: For best results, growth conditions should be favorable for active weed growth. Use high rate in rate range for less susceptible weeds; cover crops such as alfalfa, weeds in advanced stages of development, or under less favorable growth conditions. Preplant: Apply 7 to 14 days before planting corn to control emerged broadleaf weed seedlings or existing cover crops. Preemergence: Apply any time after planting, but before corn emerges to control broadleaf weed seedlings or existing cover crops. Do not use on light sandy soils.
Postemergence (Field corn, popcorn, and sweet corn) Annual broadleaf weeds Crop up to 8 inches tall Crop 8 inches tall to tasseling (directed spray only) Perennial broadleaf weeds	1/2 to 1 1 1	Apply when weeds are small and corn is less than 8 inches tall (to top of canopy). If corn is more than 8 inches tall, use drop nozzles to keep spray off foliage. Treat perennial weeds when they are in bud to bloom stage. Do not tank mix with atrazine, oil or other adjuvants. Do not apply from tasseling to hard dough stage. Note: Corn treated with 2,4-D may become temporarily brittle. Wind or cultivation may cause stem breakage during the period of time that corn is brittle. Sweet Corn: To minimize potential for crop injury, use only lowest rate in rate range.
Preharvest (Field corn and popcorn only)	up to 3	Apply after corn is in hard dough (or denting) stage. Do not apply to sweet corn.

Precautions:

- Preplant or preemergence applications to light sandy soils is not recommended.
- Corn hybrids vary in tolerance to 2,4-D. Some are easily injured. Apply only to varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information.
- **Note:** Corn treated with 2,4-D may exhibit stem brittleness for 8 – 10 days following application. During this period, the crop is more susceptible to stem breakage from cultivation or wind.

Restrictions (Field Corn and Popcorn):

- **Preharvest interval:** Do not harvest for grain or fodder within 7 days after application.
- Do not make no more than one preplant or preemergence application, one postemergence application, and one preharvest application per use season.
- Do not apply more than 6.0 pt/acre of IPA-4 (3.0 lb of acid equivalent) per use season.

Restrictions (Sweet Corn):

- **Preharvest interval:** Do not harvest within 45 days after application or permit meat or dairy animals to forage or graze treated area within 7 days after application.
- Do not make a postemergence application any less than 21 days after a prior application.
- Do not make no more than one preplant or preemergence application, and one postemergence application per use season.
- Do not apply more than 3.0 pt/acre (1.5 lb of acid equivalent) of IPA-4 per use season.

Fallowland and Crop Stubble

Fallowland is idle land, postharvest to crops or between crops.

Type of Weeds	IPA-4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	1 to 2	Use a lower rate in the rate range when weeds are small (2 to 3 inches tall) and actively growing. Use a higher in the rate range when weeds are larger and under less favorable growth conditions.
Biennial broadleaf weeds	2 to 4	Apply when musk thistles or other biennial species are in the seedling to rosette stage and before development of flower stalks. The lower rate can be used in the spring during the rosette stage. Use the highest rate in the fall or after flower stalks have developed.
Perennial broadleaf weeds	2 to 4	Apply when perennial weeds are in bud to early bloom stage or while in good vegetative growth.
Wild garlic and onion in crop stubble	4	Apply to new regrowth of wild garlic or onion that occurs in the fall after harvest of other crops.

Precaution: For best weed control results, do not cultivate for at least 2 weeks after application or until top growth is dead.

Restrictions:

- ~~Grazing and Haying Restrictions:~~ In grazed areas, do not apply more than 4 pt/acre of Formula 40 per year. **Preharvest Interval:** Do not harvest cut forage or hay from treated areas for 7 days after application. If treated area is grazed within 30 days of application, withdraw meat animals at least 3 days before slaughter.
- Do not re-apply within 30 days of a previous application.
- Do not make more than 2 applications per season.
- For grazed areas, ~~do not~~ apply more than 4.0 pt/acre (2.0 lb of acid equivalent) of IPA-4 per application.
- Do not apply more than 8.4 pt/acre (4.0 lb of acid equivalent) of IPA-4 per use season.

Planting in Treated Areas

Labeled Crops: Within 29 days after an application of this product, plant only those crops listed on this or other registered 2,4-D labels. Follow more stringent limitations, if any, provided in directions for specific crops. Labeled crops may be at risk of crop injury or loss if planted soon after application, especially during the first 14 days. Degradation factors described below should be considered in weighing this risk.

Other Crops: All other crops may be planted 30 or more days after application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.

Degradation Factors: When planting into treated areas, the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid breakdown of 2,4-D. Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application. Consult your local agricultural extension service or information about susceptible crops and typical conditions in your area.

34/43

Grain Sorghum (Milo) and Forage Sorghum

Application Timing/ Stage of Growth	IPA-4 (pt/acre)	Specific Use Directions
Postemergence[†] Crop 6 - 8 inches tall Crop 8 - 15 inches tall (directed spray only)	1/2 to 1 3/4 to 1	Apply when sorghum is 6 to 15 inches tall. If sorghum more than 8 inches tall (top of canopy), use drop nozzles to keep spray off foliage. Do not treat during boot, flowering or dough stage.

Precautions:

- **Note:** Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply IPA-4 under these conditions, use no more than 2/3 pint per acre.
- **Do not apply during boot, or later stages of growth.**
- Sorghum hybrids vary in tolerance to 2,4-D. Some are easily injured. Apply only to varieties known to be tolerant to 2,4-D. Consult the seed company or your agricultural experiment station or extension service weed specialist for this information.

Restrictions:

- **Preharvest Interval:** Do not harvest grain for 30 days after application.
- Do not permit meat or dairy animals to consume treated crop as fodder or forage within 30 days after application.
- Do not apply more than 2.0 pt/acre of IPA-4 (1.0 lb of acid equivalent) per use season.
- Do not apply more than one postemergence application of IPA-4 per use season.

Orchard Floors (Pome Fruit such as Apples and Pears, Stone Fruit, Nut Orchards and Pistachios)

Application Timing	IPA-4 (pt/acre)	Specific Use Directions
Postemergence annual and biennial weeds perennial weeds	1 - 2 up to 4	For application to orchard floors, use coarse, low-pressure sprays and sufficient water for thorough coverage of weeds. Apply to annual weeds when small and actively growing. Apply to perennial weeds from bud to bloom stage.

Precautions

- To avoid tree injury, do not allow spray drift to contact foliage, fruit, stems, trunks or trees or exposed roots.
- Do not apply when orchards are blooming.
- Do not make orchard floor applications in areas with light sandy soils.
- Avoid application immediately before irrigation and withhold irrigation for 2 days before and 3 days after application.
- Newly established trees or young orchards are more susceptible to 2,4-D injury. Apply only to orchards that have been established for at least one year and are in vigorous growth condition.

Restrictions:• **Preharvest Intervals:**

Apples and Pears: Do not harvest fruit within for 14 days after application.

Stone Fruit: Do not harvest for 40 days after application.

Nut Orchards and Pistachios: Do not harvest for 60 days after application.

- Do not cut orchard floor forage or hay within 7 days after application.
- Do not make more than 2 applications per year
- **Stone Fruits, Apples and Pears:** Do not make more than 2 applications per year and Allow at least 75 days between applications.
- **Nut Orchards, Pistachios:** Allow at least 30 days between applications.
- Do not apply more than 8.40 pt/acre of IPA-4 per use season.

Soybeans - For Use in Crop Residue Management Systems (Pre-plant Burndown Application Only)

Application Timing	IPA-4 (pt/acre)	Specific Use Directions
Preplant (Burndown)	3/4 to 1	Apply not less than 7 <u>15</u> days before planting soybeans. See Use Precautions and Restrictions below.
	1 to 2	Apply not less than 45 <u>30</u> days before planting soybeans. See Use Precautions and Restrictions below.
General Use Directions: Use IPA-4 to control emerged broadleaf weeds or existing cover crops. For best results, apply when weeds are small and actively growing. Use the higher rate in the respective rate range for larger weeds and when perennials are present. Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may be added to spray mixtures to increase the herbicidal effectiveness on certain weeds. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture.		

Use Precautions, Restrictions and Limitations:

- **Important Notice:** Unacceptable injury to soybeans planted in treated fields may occur. Whether or not soybean injury occurs and the extent of such injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present at the time of application. Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present.
- Do not disturb treated soil through tillage between application and planting of soybeans.
- Do not use on sandy soils with less than 1.0% organic matter.
- In treated fields, plant soybean seed as deep as practical, but not less than 1.0 inch deep. Adjust the planter, if necessary, to ensure that planted seed is adequately covered.
- Do not make more than one application per season regardless of the application rate used.
- ~~Do not allow livestock grazing or harvest hay, forage, or fodder from treated fields. Livestock should be restricted from feeding/grazing of treated cover crops.~~
- **Do not apply IPA-4 as a preplant application in soybeans unless you are prepared to accept the results of soybean injury, including possible stand loss and/or yield reduction.**
- During the growing season following application, do not replant treated fields with crops other than those labeled for use with IPA-4.
- Do not apply more than 2.10 pt/acre (1.0 lb of acid equivalent) of IPA-4 per use season.

Sugarcane

Application Timing/ Stage of Growth	IPA-4 (pt/acre)	Specific Use Directions
Preemergence	2 to 4	General: Consult your agricultural experiment station or extension service weed specialist local recommendations.
Postemergence		

		<p>Preemergence: Apply before cane emerges to actively growing weeds.</p> <p>Postemergence: Apply after cane emerges through canopy closure. Use higher rate for perennial weeds and difficult-to-control species.</p>
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Restrictions:

- Do not apply more than 8.0 pt/acre of IPA-4 per use season.
- **Preharvest Interval:** Do not harvest cane prior to crop maturity
- Do not make more than one Preemergence and one postemergence application per season.

Forestry, Rangeland, Established Pasture, and Non-cropland Uses

Agricultural Use Requirements for Forest Use (Except Tree Injection Use): For use in forests, follow PPE and Reentry instructions in the "Agricultural Use Requirements" section under the "Directions for Use" heading of this label.

Agricultural Use Requirements for Rangeland, Pasture, Forest (Tree Injection Only) and Non-cropland Areas: When this product is applied to rangeland and established pastures not harvested for hay or seed; non-cropland areas, and when applied by tree injection in forest sites, follow reentry requirements given in the "Non-Agricultural Use Requirements" section under the "Directions for Use" heading of this label.

Forestry Uses

Forest site preparation, forest roadsides, brush control, established conifer release (including Christmas trees and reforestation areas)

Treatment Site Method of Application	IPA-4	Specific Use Directions
Annual Weeds Biennial and perennial broadleaf weeds and susceptible woody plants	2 to 4 pt/acre 4 to 8 pt/acre	Apply when weeds are small and growing actively before the bud stage. Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear. For difficult to control perennial broadleaf weeds and woody species, use up to 4 qt of IPA-4 and 1 to 4 qt of Garlon® 3A herbicide per acre. For conifer release, make application in early spring before budbreak of conifers when weeds are small and actively growing.
Spot Treatment to control broadleaf weeds	<u>1.28 fl oz / gal of spray solution</u> (See Instructions for "Spot Treatment")	Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the recommended broadcast rate and spray to thoroughly wet all foliage. <u>Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage.</u> See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application".

Conifer Release: Species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir	1 1/2 to 3 qt/acre	To control competing hardwood species such as alder, aspen, birch, hazel, and willow, apply from mid to late summer when growth of conifer trees has hardened off and woody plants are still actively growing. Apply with ground or air equipment, using sufficient spray volume to ensure complete coverage. Because this treatment may cause occasional conifer injury, do not apply if such injury cannot be tolerated.
Directed Spray: Conifer plantations including pine	4 qt/100 gal	Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with conifer foliage and injurious amounts of spray. Apply in oil, oil-water, or water carrier in a spray volume of 10 to 100 gallons per acre.
Basal Spray (May also be used in rangeland, pastures, and noncropland)	8 qt/100 gal or	Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line. Wetting stems with the mixture may also aid in control.
Surface of Cut Stumps (May also be used in rangeland, pastures, and noncropland)	2.6 fl oz/gal of water	Apply as soon as possible after cutting trees. Thoroughly soak the entire stump with the 2,4-D mixture including cut surface, bark and exposed roots.
Frill and Girdle (May also be used in rangeland, pastures, and noncropland)		Cut frills (overlapping V-shaped notches cut downward through the bark in a continuous ring around the base of the tree) using an axe or other suitable tool. Saturate the freshly cut frills with the 2,4-D mixture.
Tree Injection Application (May also be used in rangeland, pastures, and noncropland)	(1 to 2 ml per injection site)	To control and prevent resprouting of unwanted hardwood trees such as elm, hickory, oak, and sweetgum in forests and other non-crop areas, apply by injecting at a rate of 1 ml of undiluted IPA-4 per inch of trunk diameter as measured at breast height (DBH), approximately 4 1/2 ft above the ground. Injection sites, however, should be as close to the root collar as possible and the injection bit must penetrate the inner bark. Applications may be made throughout the year, but for best results apply between May 15 and October 15. Maples should not be treated during the spring sap flow. For hard to control species such as ash, maple, and dogwood use 2 ml of undiluted IPA-4 per injection site or double the number of 1 ml injections. Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Precautions and Restrictions:

- Do not allow sprays to contact conifer shoot growth (current year's new growth) or injury may occur.
- Do not apply to nursery seedbeds.
- For conifer release, do not use on plantations where pine or larch are among the desired species.
- **Grazing and Haying Restrictions:** If grazing or haying is anticipated, do not apply more than 4 pt/acre of IPA-4 per application. Do not harvest forage or hay from treated areas for 7 days after application. If

treated area is grazed within 30 days of application, withdraw meat animals at least 3 days before slaughter.

- For broadcast applications, do not apply more than 8.40 pt/acre (4.0 lb of acid equivalent) of IPA-4 per 12-month period.
- For basal spray, cut surface stumps, and frill applications, do not apply more than 16.84 pints of DMA 4 (8.0 lb of acid equivalent) per 100 gallons of spray solution.

Rangeland, Established Grass Pastures (Including Perennial Grasslands Not In Agricultural Production Such As Conservation Reserve Program Acres)

Target Weeds or Woody Plants	IPA-4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	2	For best results, apply when weeds are small and growing actively before the bud stage. Apply when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks appear. Refer to the "Weeds Controlled" section for a listing of susceptible weed species and weeds that may be only partially controlled and require repeat applications and/or use of higher recommended rates, even under ideal conditions of application
Biennial and perennial broadleaf weeds	2 to 4	
Spot Treatment to control broadleaf weeds	1.28 fl oz / gal of spray solution (See Instructions for "Spot Treatment")	Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate recommended for this treatment site and spray to thoroughly wet all foliage. <u>Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage.</u> See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application".
Tree Injection Application		See instructions for tree injection application in "Forestry Uses" section.
Wild garlic and wild onion	4	Make three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring.
Broadleaf weed control in newly sprigged coastal bermudagrass	2 to 4	Applications may be made either preemergence or postemergence. Follow "Specific Use Directions" for annual, biennial and perennial broadleaf weed control, above.
Sand shinnery oak Sand sagebrush	2	Sand shinnery oak: Apply by aircraft between May 15 and June 15. Sand sagebrush: Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre.
Big sagebrush Rabbitbrush	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre. Retreatment may be needed.

Chamise, manzanita, buckbrush, coastal sage, coyotebrush, and chaparral species.	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use water or 1:4 oil-water emulsion as carrier and a spray volume of 5 to 10 gallons per acre. Retreatment may be needed.
Southern wild rose Broadcast application Spot treatment	up to 4 <u>1.28 fl oz / gal of spray solution</u> <u>1 gal/100 gal of spray</u>	Broadcast: Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment. Spot treatment: Apply when foliage is well developed. Thorough coverage is required. <u>Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. Use 1 gallon of IPA-4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water. Two or more treatments may be required.</u> Do not exceed 4 pt per acre per application.
CRP Acres	For program lands such as CRP, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.	

Precautions and Restrictions:

- Do not use on bentgrass, alfalfa, clover, or other legumes.
- Do not use on newly seeded areas until grass is well established.
- Do not use from early boot to milk stage where grass seed production is desired.
- Do not apply within 30 days of a previous application.
- **Grazing and Haying Restrictions:** In grazed areas, do not apply more than 4 pt/acre of IPA-4 per application. **Preharvest Interval:** Do not harvest forage or hay from treated areas for 7 days after application. If treated area is grazed within 30 days of application, withdraw meat animals at least 3 days before slaughter.
- If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable
- Do not apply more than 8.4 pt/acre (4.0 lb of acid equivalent) of IPA-4 per use season.
- Do not make more than two applications of IPA-4 per season.

Non-cropland Areas

Such as fencerows, hedgerows, roadsides, rights-of way, utility power lines, railroads, airports, and other non-crop areas

Treatment Site Method of Application	IPA-4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	2 to 4	Apply when annual weeds are small and growing actively before the bud stage. Biennial and perennial weeds should be rosette to bud stage, but not flowering at the time of application. For difficult to control perennial broadleaf weeds and woody species, tank mix up to 4 qt of IPA-4 plus 1
Biennial and perennial broadleaf weeds and susceptible woody plants	4 to 8	

40/43

Susceptible woody plants on rights-of-way	<u>4 - 8</u>	to 4 qt of Garlon 3A herbicide per acre. For ground application: (High volume) apply a total spray volume of 100 to 400 gallons per acre; (low volume) apply a total spray volume of 10 to 100 gallons per acre. For helicopter: Apply a total spray volume of 5 to 30 gallons per acre.
Spot Treatment to control broadleaf weeds	<u>1.28 fl oz / gal of spray solution</u> (See Instructions for "Spot Treatment")	Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate recommended for this treatment site and spray to thoroughly wet all foliage. <u>Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage.</u> See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application".

Tree Injection Application		See instructions for tree injection application in "Forestry Uses" section.
Southern wild rose Broadcast application Spot treatment	up to 4 <u>1.28 fl oz / gal of spray solution</u> 1 gal/100 gal of spray	Broadcast: Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment. Apply when foliage is well developed. Thorough coverage is required. <u>Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage.</u> Use 4 qt of IPA-4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water. Two or more treatments may be required.

Precautions and Restrictions:

- Do not apply to newly seeded areas until grass is well established.
- Bentgrass, St. Augustine, clover, legumes and dichondra may be severely injured or killed by this treatment.
- Do not reapply to a treated area within 30 days of a previous application.
- **Grazing and Haying Restrictions:** If grazing or haying is anticipated, do not apply more than 4 pt/acre of Weed Killer 4D per application. Do not harvest forage or hay from treated areas for 7 days after application. If treated area is grazed within 30 days of application, withdraw meat animals at least 3 days before slaughter.
- **Woody plants:** Do not apply more than 8.0 pt/acre (4 lbs acid equivalent) of IPA-4 per use season. Do not make more than one application per season.
- **Annual and perennial weeds:** Do not apply more than 4.0 pt/acre (2 lbs acid equivalent) of IPA-4 per application or make more than two applications per season.

Turf Uses

Grasses Grown for Seed or Sod Farms

41/43

Agricultural Use Requirements: When used in grass grown for seed or sod farms, follow PPE and reentry instructions in the "Agricultural Use Requirements" section of this label.

Treatment Site (Application Timing)	IPA-4 (pt/acre)	Specific Use Directions
Grasses Grown for Seed (Postemergence Use) Seedling grass (five-leaf stage or later) Well-established grasses	3/4 to 1 1 to 4	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth. Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt/acre. Cool season grasses are tolerant of higher rates. Do not apply to grass in the early boot through milk stage if seed production is desired. When grass is well established, higher rates of up to 4 pints/acre may be applied for control of hard-to-kill annual or perennial weeds.
Sod Farms (Postemergence)	2 to 4	Deep-rooted perennials such as bindweed and Canada thistle may require repeat applications. Avoid mowing sod farms for 1 to 2 days before or after application. Delay irrigation until the day following application.

Precautions and Restrictions:

- Do not use on creeping grasses such as bentgrass except as a spot treatment.
- Do not use on injury-sensitive southern grasses such as St. Augustinegrass.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- Do not reapply to a treated area within 21 days of a previous application.
- **Reseeding:** Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.
- **Grazing and Haying Restrictions:** If grazing or haying is anticipated, do not apply more than 4 pt/acre of Weed Killer 4D per application. **Preharvest Interval:** Do not harvest grass cut forage for hay from treated areas for 7 days after application. If treated area is grazed within 30 days of application, withdraw meat animals at least 3 days before slaughter.
- Do not apply more than 8.0 pt/acre of IPA-4 per use season.
- Do not make more than two applications of IPA-4 per use season.

Ornamental Turf (Excluding Grasses Grown For Seed or Sod Farms)

(Includes lawns, golf courses, cemeteries and parks, airfields, roadsides, vacant lots, drainage ditch banks)

Use Requirements for Ornamental Turf Areas: When this product is applied to ornamental turf areas, follow PPE and reentry instructions in the "Non-agricultural Use Requirements" section of this label.

Treatment Site (Application Timing)	IPA-4 (pt/acre)	Specific Use Directions
Ornamental Turf (Postemergence) Seedling grass (five-leaf stage or later)	3/4 to 1	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth. Deep-rooted perennial weeds such as bindweed and

42/43

Well-established grasses	2 to 4-3	Canada thistle may require repeat applications. Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt/acre. Cool season grasses are tolerant of higher rates.
Biennial and perennial broadleaf weeds	4-3	

Precautions, Restrictions:

- Do not use on creeping grasses such as bentgrass except as a spot treatment.
- Do not use on injury-sensitive southern grasses such as St. Augustinegrass.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- ~~Do not reapply within 21 days of a previous application.~~
- **Reseeding:** Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.
- Do not apply more than 2 broadcast applications per year per treatment site (does not include spot treatments).
- Do not apply more than 4-3 pt/acre of IPA-4 (2 1.5 lb of acid equivalent) per application.
- Do not apply more than 6 pt/acre of IPA-4 (3 lb of acid equivalent) per season.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

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- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

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