



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 31 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Larry R. Hammond
DOWELANCO
QUAD IV 9002 PURDUE RD
INDIANAPOLIS IN 46268

Subject: Label Amendment Submission of 07/08/93 in Response to PR Notice 93-7
EPA Reg. No. 62719-1
FORMULA 40 HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with SoyCarole Ink on paper that
contains at least 50% recycled fiber

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Larry E. Hammond
DOWELANCO
QUAD IV 9002 PURDUE RD
INDIANAPOLIS IN 46268

Subject: Label Amendment Submission of 07/08/93
to Comply with WPS Labeling Requirements
EPA Reg Nr. 62719-1
FORMULA 40 HERBICIDE

The following specific comments pertain to your
WPS labeling submission concerning the product
cited above:

Please conform with the special 2,4-D guidance issued by
EPA on September 13, 1993 for adding WPS statements.

You have incorrect wording in the first paragraph in the
Agricultural Use Requirements box on your proposed label.
That paragraph must contain the exact wording of the
paragraph shown as "2" in Section F on Part 2 of the Product
Worksheet in Supplement Three-A to PR Notice 93-7.

The statement on your proposed label that references the
Agricultural Use Requirements box in your proposed
supplemental labeling contains incorrect language. Use the
exact text and placement of the referral statement as shown
on page 43 in Supplement Three to PR Notice 93-7.

The bodywear requirement for early entry in the Agricultural
Use Requirements box on your proposed labeling is missing or
incorrect. Remove the incorrect requirement (if any) and
add "Coveralls". The exact location is shown in Sections F
and G on Part 2 of the Product Worksheet in Supplement
Three-A to PR Notice 93-7.

Labeling amended to meet the requirements of the Worker Protections Sta (WPS) and 2,4-D Exposure Reduction Program (ERP).

(Editor's Note: Deleted text indicated by strike-through and added text un

(Container Label)

(logo) DowElanco

Formula 40*

For the selective control of many broadleaf weeds in non-crop areas, grass rangelands and in certain crops. Also for control of trees by injection

Active Ingredients:

- 2,4-dichlorophenoxyacetic acid, trisopropanolamine salt† 34.05%
- 2,4-dichlorophenoxyacetic acid, dimethylamine salt† 21.97%

Inert Ingredients 43.98%

Acid Equivalents:

2,4-dichlorophenoxyacetic acid† -- 36.5% -- 3.8 lb/gal

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

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out or 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.)

Causes Irreversible Eye Damage And Skin Irritation - Harmful If Swallowed

~~Do not get in eyes, on skin, or on clothing. When mixing, loading or applying product, or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes. It is recommended that safety glasses have front, brow and temple protection. For aerial applicators in an enclosed cockpit, eye protection is not required.~~

~~Wash hands, face and arms with soap and water as soon as possible after loading or applying this product. Wash hands, face and arms with soap and water before eating, smoking or drinking. Wash hands and arms before using the toilet.~~

~~After work, remove all clothing and shower using soap and water. Do not re-wear clothing worn during previous days mixing, loading or application of this product. Clothing must be kept and washed separately from other household laundry. Wash saturated clothing as soon as possible and shower.~~

(Editor's note: The above personal hygiene statements were incorporated into the User Safety Recommendations)

ACCEPTED
with COMMENTS
by EPA Letter Dated
JAN 31 1994

BEST AVAILABLE COPY

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

62719-1

~~Note: For containers of over 1 gallon, but less than 5 gallons: Persons engaged in pouring this product must also wear coveralls or chemical resistant apron.~~

~~For containers of 5 gallons or more: A mechanical transfer system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.~~

~~(Editor's note: The two statements immediately above have been incorporated into the "PPE" and "Engineering Controls" sections.)~~

Personal Protective Equipment (PPE)

Applicators and other handlers, including persons repairing or cleaning equipment, must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear such as face shield or safety glasses (brow and temple protection recommended).
Eye protection is not required for ground or aerial applicators in completely enclosed cabs or cockpits.

• Note: For containers of over 1 gallon, but less than 5 gallons: Persons engaged in pouring this product must also wear coveralls or chemical-resistant apron.

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statements:

When handlers use closed systems, 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.

For containers of 5 gallons or more, A mechanical transfer system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

User Safety Recommendations

Users should:

- Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product and before eating, smoking or drinking. Wash hands and arms before 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. After work, remove all clothing, shower using soap and water and change into clean clothing. Launder clothing worn during mixing, loading, application or cleaning and repairing equipment before reuse.

First Aid

If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention promptly.

If on skin: Flush skin with water and get medical attention if signs of irritation develop. Remove and wash contaminated clothing before reuse.

If swallowed: Promptly drink a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Induce vomiting by placing finger in back of throat. Never give anything by mouth to an unconscious person. Avoid alcohol. Call a physician.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

BEST AVAILABLE COPY

Environmental Hazards

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal area below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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 or 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.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), and Directions for Use including Agricultural Use Requirements and Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400.

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

EPA Reg. No. 62719-1

EPA Est. 464-MI-1

*Trademark of DowElanco
DowElanco • Indianapolis, IN 46268, U.S.A.

Herbicide

Net Contents __ gal

BEST AVAILABLE COPY



(Label Booklet)

(logo) **DowElanco**

Formula 40*

For the selective control of many broadleaf weeds in non-crop areas, grass rangelands and in certain crops. Also for control of trees by injection

Active Ingredients:

2,4-dichlorophenoxyacetic acid, trisopropanolamine salt†	34.05%
2,4-dichlorophenoxyacetic acid, dimethylamine salt†	21.97%

Inert Ingredients 43.98%

Acid Equivalents:

2,4-dichlorophenoxyacetic acid† -- 36.5% -- 3.8 lb/gal

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

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.)

Refer to inside of label booklet for precautionary information and Directions including STORAGE AND DISPOSAL.

Notice: Read the entire label. Use only according to label directions. Before buying product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of an emergency endangering health or the environment involving this product, call 517-636-4400.

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

EPA Reg. No. 62719-1

EPA Est. 464

*Trademark of DowElanco
DowElanco • Indianapolis, IN 46268, U.S.A.

Herbicide

BEST AVAILABLE C

Precautionary Statements

Hazards to Humans and Domestic Animals

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.)

Causes Irreversible Eye Damage And Skin Irritation • Harmful If Swallowed

~~Do not get in eyes, on skin, or on clothing. When mixing, loading or applying this product, or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes. It is recommended that safety glasses include front, brow and temple protection. For aerial applicators in an enclosed cockpit and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required.~~

~~Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product. Wash hands, face arms with soap and water before eating, smoking or drinking. Wash hands and arms before using the toilet.~~

~~After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during previous days mixing, loading or application of this product. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.~~
(Editor's note: The above personal hygiene statements were incorporated into User Safety Recommendations)

~~Note: For containers of over 1 gallon, but less than 5 gallons: Persons engaged in pouring this product must also wear coveralls or chemical resistant apron. For containers of 5 gallons or more: A mechanical transfer system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.~~

~~*(Editor's note: The two statements immediately above have been incorporated into the "PPE" and "Engineering Controls" sections.)*~~

Personal Protective Equipment (PPE)

Applicators and other handlers, including persons repairing or cleaning equipment, must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear such as face shield or safety glasses (brow and temple protection recommended).
Eye protection is not required for ground or aerial applicators in completely enclosed cabs or cockpits.

• Note: For containers of over 1 gallon, but less than 5 gallons: Persons engaged in pouring this product must also wear coveralls or chemical-resistant apron.

BEST AVAILABLE COPY

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statements:

When handlers use closed systems, 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.

For containers of 5 gallons or more, A mechanical transfer system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

User Safety Recommendations

Users should:

- Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product and before eating, smoking or drinking. Wash hands and arms before 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. After work, remove all clothing, shower using soap and water and change into clean clothing. Launder clothing worn during mixing, loading, application or cleaning and repairing equipment before reuse.

First Aid

If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention promptly.

If on skin: Flush skin with water and get medical attention if signs of irritation develop. Remove and wash contaminated clothing before reuse.

If swallowed: Promptly drink a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Induce vomiting by placing finger in back of throat. Never give anything by mouth to an unconscious person. Avoid alcohol. Call a physician.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Environmental Hazards

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal area below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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 or 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.

BEST AVAILABLE COPY

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 exemptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

STORAGE AND DISPOSAL

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

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

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.

Plastic Container Disposal: Do not reuse container. Triple rinse (or equivalent). Then dispose of in a sanitary landfill, or by incineration, or, if allowed by local authorities, by burning. If burned, stay out of smoke.

Metal Container Disposal: Do not reuse container. 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.

Tank Cleaning: Triple rinse (or equivalent) and wash with appropriate cleaners before reusing. Consult federal, state, or local disposal authorities for approved alternative procedures.

BEST AVAILABLE COPY

General Information

Formula 40 herbicide is intended for selective control of many broadleaf weeds in non-crop areas, pastures, rangelands and in certain crops. It may also be applied by injection to control trees.

General Use Precautions

Avoid contact with 2,4-D susceptible crops and other desirable broadleaf plants. Do not apply directly to or otherwise permit even minute amounts to contact cotton, grapes, tobacco, vegetables, flowers, ornamentals or other desirable plants susceptible to 2,4-D.

Do not use in or near a greenhouse.

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

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

Crop Injury: Injury to crops may occur when this herbicide is used as approved elsewhere. If you are not prepared to accept some degree of crop injury, do not use this product. Crop injury in response to 2,4-D and some are easily injured. Apply Formula 40 only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect tolerance to 2,4-D, consult your seed company, state agricultural extension service or qualified consultant for advice.

Avoid Spray Drift: Applications should be made only when there is no hazard from spray drift. Very small quantities of the spray, which may not be visible, may severely injure susceptible plants both during growing and dormant periods. Use coarse sprays to minimize drift since, under adverse conditions, fine spray droplets may drift a mile or more. A spray thickening agent such as Nalco Put, may be used with this product to aid in reducing spray drift. If used, follow all use recommendations and precautions on the product label.

Drift from aerial or ground application may be reduced by:

1. Applying as near to the target as possible in order to obtain coverage.
2. By increasing the volume of spray mix per acre.
3. By decreasing the pounds of pressure at the nozzle tips.
4. By using nozzles which produce a coarse spray pattern.
5. By not applying when wind is blowing toward susceptible crops or valuable plants.
6. (Aerial) By using straight stream nozzles directed straight back and using a spray boom not less than 3/4 the wing or rotor span of aircraft.

Determine Air Movement and Directions Before Foliage Application: Use a smoke test or other means at or near the application site for the detection of air movement, air stability or inversions. Such a condition exists when there is little or no wind and air temperature is lower at ground level than at higher levels. Use appropriate drift control measures or avoid application when wind is moving toward nearby desirable susceptible plants or sensitive areas.

Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth. Violent wind storms may move soil particles. If 2,4-D is on soil particles and they are blown onto susceptible plants, visible symptoms may appear. Serious injury is unlikely. The hazard of 2,4-D on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.

To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for Formula 40 unless appropriately cleaned first. Local conditions may affect herbicide effectiveness. Consult your State Agricultural Experiment Station or Extension Service weed control cleaning methods which are in compliance with local regulations and for advice in selecting the best cleaning method from this label to best fit local conditions. Be sure that use of this product conforms to all application regulations.

BEST AVAILABLE COPY

Weeds Controlled

Formula 40 herbicide is recommended for control of numerous broadleaf weeds and certain 2,4-D susceptible woody perennials without injuring most grasses. Species controlled include the following plus many others:

bitterweed	plantains
broomweed	poorjoe
burdock	pusley, Florida
carpetweed	ragweed, common
chicory	rapé, wild
cocklebur	rocket, yellow
coffeeweed	shepherdspurse
croton	sicklepod
dandelion	smartweed, annual
dock	sneezeweed, bitter
galinsoga	sowthistle, annual
hemp, wild	spanishneedles
jewelweed	sunflower
jimsonweed	sweetclover
lambquarters	thistle, bull
loco, bigbend	thistle, musk
lupines	thistle, Russian
mallow, Venice	velvetleaf
marshelder	vetch
morningglory, annual	water plantain
pennycress, (fanweed)	wild, mustard
pennywort	witchweed
pepperweed, field	wormwood
pigweed†	

†The control of "hybrid" pigweeds appears to be less satisfactory from 2,4-D products than formerly experienced on "non-hybrid" varieties. Since 2,4-D herbicides are not as effective on the "hybrid" pigweeds, it is necessary to apply higher rates of 2,4-D for control, especially later in the growing season. Higher rates injure some crops, so less than satisfactory pigweed control may be experienced by the highest tolerated crop dosages.

Therefore, DowElanco no longer includes pigweed among the species covered by the performance guarantee statements on the labels for Formula 40. At this time, this disclaimer applies only to the High Plains of Texas and western Oklahoma, including the Panhandles. All other guarantees on these product labels are unchanged by this disclaimer.

Generally, the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply Formula 40 during warm weather when weeds are young and growing actively. Use enough spray volume for uniform coverage by ground or air application. If only bands or rows are treated, leaving middles unsprayed, the dosage per crop acre is reduced proportionately. Do not apply where spray drift may be a problem due to proximity of susceptible crops or other desirable plants. Read and follow all Use Precautions given on this label.

To Prepare the Spray

Mix Formula 40 only with water, unless otherwise directed on this label. Add about half the water to the mixing tank, then add the Formula 40 with agitation, and finally the rest of the water with continuing agitation. Note: Adding oil, wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

Use with Liquid Fertilizer

Formula 40 may be combined with liquid fertilizers suitable for foliar application to accomplish weeding and feeding of corn, small grains, sorghum and grass pastures in one operation. Use Formula 40 in accordance with recommendations for these crops given in the following text and table. Use liquid

fertilizer at rates recommended by supplier or local extension service specialist. To prepare the spray, Formula 40 must first be premixed with water. For liquid nitrogen fertilizer use a premix consisting of 1 part of Formula 40 and 4 parts of water; for other liquid fertilizers use 1 part of Formula 40 with 50 to 60 parts of water. Add the premix to the fertilizer while maintaining continuous agitation during both mixing and spraying operations. Apply the spray the same day it is prepared; do not store. Note: Always premix Formula 40 with water before adding to the liquid fertilizer.

Approved Uses

Crop Uses

Agricultural Use Requirements for Crops
 For the following crop uses, follow PPE and Reentry Instructions in the "Agricultural Use Requirements" section of this label.

Amount of Formula 40 to Use in Crops
 (air or ground application)

Note: Do not apply when weather conditions favor drift from treated areas. Read complete directions and precautions before using.

Crop	Dosage per Acre	
	Normal rates (usually safe to crop)	Higher Rates for Special Situations†† (more likely to injure crop)
Small Grains Spring Postemergence wheat, barley, rye, millet oats Preharvest (dough stage) wheat, barley, oats	2/3 to 1 1/3 pt 1/2 to 1 pt 1 to 2 pt	2 to 3 pt 1 1/2 to 2 pt 2 to 3 pt
Corn† Preemergence Emergence† Postemergence† up to 8 inches tall 8 inches to tasseling (use only directed spray) Preharvest	2 to 4 pt 1 pt 1/2 to 1 pt 1 pt 1 to 2 pt	1 1/2 pt 1 1/2 to 2 1/2 pt
Sorghum (Milo)† Postemergence 6 to 8 inches tall 8 to 15 inches tall (use only directed spray)	2/3 to 1 pt 1 pt	1 1/2 to 2 pt
Rice	1 to 2 1/2 pt	2 to 3 pt
Sugarcane Fall, after harvest or planting Spring, once or twice before close-in Summer, up to 6 weeks before harvest	2 to 4 pt 2 to 4 pt 2 1/2 pt	
Asparagus	1 1/2 to 2 qt	
Strawberries	1 to 1 1/2 qt	

†Corn and sorghum varieties vary in tolerance to 2,4-D; some are easily injured. Before spraying, get information on 2,4-D tolerance of specific varieties and spray only those known to be resistant to 2,4-D injury. If plants are more than 8 inches tall, use directed spray and keep spray off corn and sorghum foliage.

††These higher rates may be needed to handle difficult weed problems in certain areas such as under dry conditions especially in western areas. However, do not use unless possible crop injury will be

acceptable. Consult State Agricultural Experiment Station or Extension Service weed spee recommendations or suggestions to fit local conditions.

Weed Control in Asparagus

See Table for recommended use rates. To control wild morningglory and certain other bro apply in about 60 gallons of water per acre for ground application and about 12 gallons per application. Apply on actively growing weeds, usually in April or May. If spears are present, immediately after cutting. Make no more than 2 applications during the harvest season and be spaced at least one month apart. Spears contacted by the spray may be malformed and Malformed spears should be cut immediately and discarded. Post-harvest spraying should ground rig using drop nozzles to avoid spraying the fern.

Weed Control in Small Grains Not Underseeded with a Legume (Barley, Rye, Oats, Millet)

See Table for recommended use rates. Spray after grain begins tillering and before the bo (usually 4 to 8 inches tall) and weeds are small. Do not apply before the tiller stage early boot through the milk stage. To control weeds that will interfere with harvest or perennial weeds, preharvest treatment can be applied when the grain is in the dough stage will be obtained when soil moisture is adequate for plant growth and weeds are growing well permit dairy animals or meat animals being finished for slaughter to forage or graze treated within 2 weeks after treatment.

Weed Control in Corn

See Table for recommended use rates.

Preemergence: Apply to soil anytime after planting but before corn emerges. Only em broadleaf weeds are likely to be controlled. Do not use on very light, sandy soil.

Emergence: Apply just as corn plants are breaking ground.

Postemergence: Apply to emerged corn. When corn is over 8 inches tall use drop nozzle spray off corn foliage. Do not apply from tasseling to dough stage. Injury to corn is most like Formula 40 is applied when corn is growing rapidly under high temperature and high soil mo conditions. In such situations, use the low rate of 1/2 pint per acre. After application, delay to 10 days to allow the corn to overcome any temporary brittleness. Note: Hybrids vary in 2,4-D. Some are easily injured, especially sweet corn. Spray only varieties known to be tol Consult the seed company or your Agricultural Experiment Station or Extension Service We for this information before using.

Preharvest: After the hard dough or denting stage, apply by air or ground equipment to perennial weeds, decrease weed seed production, and control tall weeds such as bindwee dogbane, jimsonweed, ragweed, sunflower, velvetleaf, and vines that interfere with harves Do not forage or feed corn fodder for 7 days following application.

Weed Control in Sorghum (Milo)

See Table for recommended use rates. Treat only after the sorghum is 6 inches high and p before it is 15 inches high. Do not treat during the boot, tasseling or early dough stages. R drift by keeping the boom and spray nozzles as low as possible. If crop is taller than 8 inche nozzles to keep the spray off the leaves. Temporary crop injury can be expected under co soil moisture and high air temperatures. If it is necessary to apply Formula 40 under these c no more than 2/3 pint per acre. Note: Hybrids vary in tolerance to 2,4-D. Some are easily i only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Station or Extension Service Weed Specialist for this information.

Weed Control in Rice

See Table for recommended use rates. Apply in the late tillering stage of rice development first joint development (first to second green ring), usually 6 to 9 weeks after emergence. D after panicle initiation, after rice internodes exceed 1/2 inch, at early seedling, early panicle flowering or early heading growth stages. Do not use in rice paddies where shellfish are of importance or where flood water is used for irrigation of other crops. Note: Some rice vari

certain conditions can be injured by 2,4-D. Therefore before spraying consult local Extension Service or University specialists for appropriate rates and timing of 2,4-D sprays.

Weed Control in Sugarcane

See Table for recommended use rates. Use up to 4 applications per year in accordance with state recommendations. Note: Do not apply within 8 weeks before harvest.

Weed Control in Strawberries

See Table for recommended use rates. To control many broadleaf weeds in established or old strawberry plantings apply in 25 to 50 gallons of water per acre in early spring when strawberries are dormant or immediately after the last picking. Do not apply unless possible injury to the crop is acceptable. Follow recommendations of State Extension Weed or Horticultural Specialists to fit local conditions.

Weed Control in Stone Fruit and Nut Orchards

Apply 3 pints per acre for control of annual broadleaf weeds in the orchard floor. Use coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Do not use in light sandy soil. Do not use in California. Do not apply to bare ground as injury may result. Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment. Do not allow spray to drift or contact foliage, fruit, stems, trunks of trees, or exposed roots as injury may result. Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition. Do not apply during bloom. Do not graze or feed cover crops from treated orchards. Do not make more than two applications per year. Do not harvest stone fruit within 40 days of applications or harvest nuts within 60 days of application.

Weed Control on Fallow Land

Use 1 1/2 to 2 1/4 quarts per acre on annual broadleaf weeds and up to 3 quarts per acre on established perennial species, such as Canada thistle and field bindweed. Apply to actively growing weeds. Do not plant treated fallow land until three months after treatment, or until chemical has disappeared from soil.

Rangeland, Pasture, Non-crop and Forest Uses

Use Requirements for Rangeland, Pasture, Forest and Non-cropland Areas: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is applied to rangeland, pasture or non-cropland areas, and forest sites when applied by tree injection method only.

Weed Control in Established Grass Pastures, Conservation Reserve, and Rangelands

Use at 2 to 4 pints per acre. Apply preferably when weeds are small and growing actively before the bud stage. Do not use from early boot to milk stage where grass seed production is desired. Do not use on newly seeded areas until grass is well established. Do not use on bentgrass, alfalfa, clover, or other legumes. When using on Conservation Reserve lands, follow all applicable state and Federal regulations. Follow the most severe grazing restrictions imposed either by the pesticide label or by the USDA Acreage Conservation Reserve Program, whichever is longest.

Grazing Restrictions: Do not graze lactating dairy animals on treated areas within 7 days after application. Do not harvest grass cut for hay from treated areas for 30 days. Withdraw meat animals from treated forage at least 3 days before slaughter.

Control of Southern Wild Rose, Perennial Pepperweed, Hoarse Cress

For rangeland or pasture, the maximum application rate is 2 quarts per acre per application. On roadsides and fence rows use 1 gallon of Formula 40 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well-developed. Two or more treatments may be required. Apply at a maximum rate of 4 quarts per acre per application as a spot treatment.

Grazing Restrictions: Do not graze lactating dairy animals on treated areas within 7 days after application. Do not harvest grass cut for hay from treated areas for 30 days. Withdraw meat animals from treated forage at least 3 days before slaughter.

Spot Treatment in Non-crop Areas

To control broadleaf weeds in small areas with a hand sprayer, use 1/4 pint (4 oz) of Formula 40 in 3 gallons of water and spray to thoroughly wet all foliage.

Tree Injection Treatment

To control unwanted hardwood trees such as elm, hickory, oaks and sweetgum in forests and non-crop areas, apply Formula 40 by injecting 1 ml of the undiluted product through the bark around the trunk at intervals of 1 to 3 inches between edges of the injector wounds. For harder to control species such as ash, maples and dogwood use 2 ml of undiluted Formula 40 per injection site. Continuous cuts around the trunk often provide improved control. Also, cuts near the ground level may be more effective than at higher levels. Treatments can be made at any season; however, effectiveness may be less during winter months. Maples should not be treated during the spring sap flow.

Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Turf Uses

Use Requirements for Turf Including Sod Farms and Turfgrass Grown for Seed

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

Restrictions on Retreatment: Do not apply more than 2 broadcast applications per year per treatment site.

Weed Control in Sod Farms

Use 1 to 3 quarts of Formula 40 per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. Usually 2 quarts per acre will provide adequate weed control. Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treating nor on freshly seeded turf until grass is well established. Reseeding should be delayed following treatment. With spring application, reseed in the fall; with fall application, reseed in the spring. Legumes are usually damaged or killed. Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeated applications.

Weed Control in Turfgrass Grown for Seed

Use 1 to 4 pints per acre in spring or fall. Do not apply from early boot to the milk stage of the grass. Spray seeding grass only after the five-leaf stage, using 3/4 to 1 pint per acre to control small seeding weeds. After the grass is well established, higher rates, up to 4 pints, can be used to control hard-to-kill annual or perennial weeds. Do not use on bentgrass unless grass injury can be tolerated. See "Grazing Restrictions" in grass pastures section above.

Broadleaf Weed Control in Non-cropland Grass Areas (Excluding Sod Farms and Turf Grown for Seed) Such as Lawns, Golf Courses, Cemeteries and Parks, Airfields, Roadsides, Vacant Lots, Drainage Ditch Banks

Use 1 to 2 quarts of Formula 40 per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. Usually 2 quarts per acre will provide adequate weed control. Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treating nor on freshly seeded turf until grass is well established. Reseeding of lawns should be delayed following treatment. With spring application, reseed in the fall; with fall application,

reseed in the spring. Legumes are usually damaged or killed. Deep-rooted perennial weeds bindweed and Canada thistle may require repeated applications.

Warranty Disclaimer

DowElanco warrants that this product conforms to the chemical description on the label and is fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DOWELANCO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, and other unintended consequences may result because of such factors as use of the product or failure to follow label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes, etc.), presence of other materials, the manner of application or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's option, one of the following:

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

DowElanco shall not be liable for losses or damages resulting from handling or use of this product if DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

Copyright© 1993 DowElanco

Revisions:

- 1) Added requirements of the Worker Protection Standard
- 2) Added requirements to comply with the 2,4-D Exposure Reduction Program.
- 3) Reformatted label to be compatible with requirements of the 2,4-D Exposure Reduction Program and Worker Protection Standard.

BEST AVAILABLE CO