UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

62719-242

11/22/99

10t4

Larry E. Hammond Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

NOV 22 1999

Dear Mr. Hammond:

Subject:

Revisions in Precautionary Language

Formula 40 IVM

EPA Registration No. 62719-242

Your Submission Dated August 25, 1999

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provision:

Delete the box with the statements "Use Requirements for Non-cropland Areas: No worker entry restrictions or worker notification requirements apply when this product is applied to non-cropland areas" that appear directly following the Non-crop Uses heading.

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the referenced label, incorporating the above change, before releasing the product for shipment.

Sincerely yours,

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

Enclosure

DK: 305	-7546:HB/	1PM23	C	oncurrences			
SYMBOL +	7505C						
SURNAME +	D. KENNY					<b>,</b> 	
DATE -	11/22/99						

20/11

(Base label):

(logo) Dow AgroSciences LLC

# Formula 40\* IVM

For the selective control of many broadleaf weeds in non-crop areas. Also for control of trees by injection.

Active Ingredients

2,4-dichlorophenoxyacetic acid,		
as the triisopropanolamine salt	34.0	15%
2,4-dichlorophenoxyacetic acid,		
as the dimethylamine salt	21.9	17%
Inert Ingredients	43.9	8%
Total	00.0	10%

2,4-dichlorophenoxyacetic acid<sup>†</sup> -- 36.5% -- 3.8 lb/gal †Isomer Specific by AOAC Method No. 978.05(15th Ed.)

ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV 22 1999

Under the Federal Insecticide, Fundicide, and Redemticide Act as amended, for the perticide registered under EPA Reg. No.

## 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.)

## **Precautionary Statements**

### Hazards to Humans and Domestic Animals

Corrosive • Causes Irreversible Eye Damage • Harmful If Swallowed Or Absorbed Through The Skin

Do not get in eyes or on clothing. Avoid contact with skin.

### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Waterproof gloves
- · Shoes plus socks
- Protective eyewear
- Note: For containers of over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a
  mechanical system (such as probe and pump) to transfer the contents of this container must wear
  coveralls or chemical-resistant apron in addition to other required PPE.

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. After each day of use, clothing or PPE must not be reused until it has been cleaned.

EPA REC'D 8/26/99

30+11

### **Engineering Controls Statements**

For containers of 5 gallons or more: A mechanical system (such as probe and pump) 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 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.

### **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 eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

If swallowed: Call a doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol.

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

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

#### **Environmental Hazards**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. 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 rhandling 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.

#### Agricultural Use Requirements

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

Refer to label booklet for Directions for Use including 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 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. 62719-242

EPA Est. 00000-XX-00

\*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

# Herbicide

**Net Contents XXX** 

SoflI

(Datapack cover):

(logo) Dow AgroSciences LLC

# Formula 40\* IVM

For the selective control of many broadleaf weeds in non-crop areas. Also for control of trees by injection.

Active Ingredients

- 2,4-dichlorophenoxyacetic acid<sup>†</sup> -- 36.5% -- 3.8 lb/gal <sup>†</sup>Isomer Specific by AOAC Method No. 978.05(15th Ed.)

## Keep Out of Reach of Children

## DANGER PELIGRO

Si usted no entiende la etíqueta, 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 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 buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health of 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. 62719-242

EPA Est. 00000-XX-00

\*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

# Herbicide

**Net Contents XXX** 

6 of 11

(Page 1 through end):

### **Precautionary Statements**

### Hazards to Humans and Domestic Animals

# **DANGER**

Corrosive • Causes Irreversible Eye Damage • Harmful If Swallowed Or Absorbed Through The Skin

Do not get in eyes or on clothing. Avoid contact with skin.

### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- · Shoes plus socks
- · Protective evewear
- Note: For containers of over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump) to transfer the contents of this container must wear coveralls or chemical-resistant apron in addition to other required PPE.

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. 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) 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 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.

## **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 eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

If swallowed: Call a doctor or get medical attention. Do not induce vomiting or give anything by mutth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol.

70111

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

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

### **Environmental Hazards**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. 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.

### 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.

### 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 acutely 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.

### General Information

#### 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, fruit trees, 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.

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

Use of Formula 40 IVM in forests is limited to application by tree injection only.

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

Avoid Spray Drift: Applications should be made only when there is no hazard from spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift since, under adverse weather conditions, fine spray droplets may drift a mile or more. A spray thickening agent such as Nalco-Trol or Sta 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 no longer than 3/4 the wing of rotor span of aircraft.

**Determine Air Movement and Directions Before Foliar Application:** Use a smoke generator or other means at or near the application site for the detection of air movement, air stability or temperature inversions. Such a condition exists when there is little or no wind and air temperature is lower near the ground than at higher levels. Use appropriate drift control measures or avoid application when smoke 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 the susceptible plants, visible symptoms may appear. Serious injury is unlikely. The hazard of movement 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 the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service Weed Specialists for cleaning methods which are in compliance with local regulations and for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations.

#### Weeds Controlled

Formula 40 IVM 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	rape, wild	
cocklebur	rocket, yellow	
coffeeweed	shepherdspurse	,
croton	sicklepod	1,1,1,1
dandelion	smartweed, annual	ه ۱ د و د د م
dock	sneezeweed, bitter	
galinsoga	sowthistle, annual	
hemp, wild	spanishneedles	1
jewelweed	sunflower	
jimsonweed	sweetclover	
lambsquarters	thistle, bull	

Page 8

loco, bigbend

lupines

thistle, musk

mallow, Venice

thistle, Russian velvetleaf

marshelder

vetch

morningglory, annual pennycress, (fanweed)

water plantain wild, mustard

pennywort

witchweed

pepperweed, field

witchweed

pigweedT

wormwood

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.

Therefore, pigweed is no longer 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.

## **Approved Uses**

#### **Turf Uses**

Use Requirements for Turf (Excluding Sod Farms or Grass Seed Crops)

Restricted Entry Interval: 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.

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

100H1

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

### Non-crop Uses

Use Requirements for Non-cropland Areas: No worker entry restrictions or worker notification requirements apply when this product is applied to non-cropland areas.

#### 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 forest and other 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 entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

### Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences 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. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences 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 Dow AgroSciences' election, 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

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow 'AgroSciences 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 Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

\*Trademark of Dow AgroSciences LLC EPA-Accepted: \_\_/\_/\_