(Base Label)

GROUP 4 HERBICIDE

# Co-Op 2,4-D Ester 700 HERBICIDE

# (COMMERCIAL) AGRICULTURAL + RESTRICTED

READ THE LABEL AND THE ATTACHED BOOKLET BEFORE USING.

**ACTIVE INGREDIENT:** 2,4-D present as 2-ethylhexyl ester: 660 g./L

EMULSIFIABLE CONCENTRATE

**REGISTRATION NO: 32882** 

PEST CONTROL PRODUCTS ACT

Net Contents: 10 litres



# POTENTIAL SKIN SENSITIZER SKIN IRRITANT

# Manufactured For:

Federated Co-operatives Limited

P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9

By:

Interprovincial Cooperative Limited, P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9 (204) 233-3461

GROUP 4 HERBICIDE

# Co-Op 2,4-D Ester 700 HERBICIDE

**EMULSIFIABLE CONCENTRATE** 

# **COMMERCIAL (AGRICULTURAL) + RESTRICTED**

READ THE LABEL AND THE ATTACHED BOOKLET BEFORE USING.

**ACTIVE INGREDIENT:** 2,4-D present as 2-ethylhexyl ester: 660 g /L

**REGISTRATION NO: 27819** 

PEST CONTROL PRODUCTS ACT

Net Contents: 10 litres



# POTENTIAL SKIN SENSITIZER SKIN IRRITANT

## Manufactured For:

Federated Co-operatives Limited

P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9

By:

Interprovincial Cooperative Limited, P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9 (204) 233-3461 PRECAUTIONS: Handling precautions: KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes, skin and clothing. Avoid inhaling vapours or mist. Fatal or poisonous if swallowed. Potential skin sensitizer. Causes skin irritation. DO NOT get on skin. Protective Clothing and Equipment: Handling the concentrate (mixing and loading): wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. When handling more than 265 kg a.e. (402 L) per day, workers must also use a closed system. Handling the dilute spray solution (during application or repairing or cleaning equipment): wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Gloves are not required during application when applicator is in an enclosed tractor or an enclosed airplane cockpit. Mixers/ loaders/ applicators using mechanically pressurized handgun must wear a respirator if they will be handling more than 5 kg a.e. (7.58 L) per day. DO NOT handle more than 8 kg. a. e. (12.1 L) per day. Operator use precautions: Wear freshly laundered clothing and clean protective equipment daily. Rinse gloves before removal. Wash hands before eating, drinking, using tobacco or using the toilet. If herbicide penetrates clothing remove immediately, then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. After using this product, remove clothing and launder separately and promptly, and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry. After work, remove all clothing and shower using soap and water. GENERAL PRECAUTIONS: Handle with care and mix only in a closed container. Use only in a well-ventilated area. Clean spray equipment thoroughly after use.

**RE-ENTRY INTERVAL:** Do not enter treated areas within 12- hours after application.

**ENVIRONMENTAL PRECAUTIONS:** Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USEP. Refer to the attached booklet for complete environmental hazards.

FIRST AID: In case of poisoning, call a physician or poison control centre IMMEDIATELY. If on skin or clothing, take off contaminated clothing. Rinse skin IMMEDIATELY with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice. 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 centre or doctor for treatment advice. If swallowed, call a poison control centre or doctor IMMEDIATELY for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice. Take the container, label or product name and Pest Control Product registration number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote. Treatment of any systemic intoxication should be primarily symptomatic and supportive. Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Do not induce vomiting. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea.

**STORAGE:** Store this product away from food or feed. May be stored at any temperature. SHAKE WELL BEFORE USING. Keep in original container during storage.

DISPOSAL INFORMATION: For Recyclable Containers: DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site: 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. 2. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements. For Returnable Containers: DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer). For Refillable Containers: For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. DO NOT reuse this container for any other purpose. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.

**GROUP** 4 HERBICIDE

# Co-Op 2,4-D Ester 700 HERBICIDE

**EMULSIFIABLE CONCENTRATE** 

# **COMMERCIAL (AGRICULTURAL) + RESTRICTED**

READ THE LABEL AND THE BOOKLET BEFORE USING.

**ACTIVE INGREDIENT:** 2,4-D present as 2-ethylhexyl ester: 660 g /L REGISTRATION

NO: 27819

PEST CONTROL PRODUCTS ACT

Net Contents: 10 litres



**DANGER** 

**POISON** 

POTENTIAL SKIN SENSITIZER SKIN IRRITANT

Manufactured For:

Federated Co-operatives Limited

P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9

By:

Interprovincial Cooperative Limited, P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9 1-204-233-3461

# LABEL INDEX - Co-Op 2,4-D Ester 700 Herbicide

| Spring Wheat, Barley, Rye                   | GO TO SECTION 1  | Weeds & Brush on Non-Crop/Non-                     | GO TO SECTION 11 |
|---|------------------|--|------------------|
|   |                  | Grazed Land  |                  |
| Winter Wheat, Fall Rye                      | GO TO SECTION 2  | Basal Bark & Stump-Brush, Trees                    | GO TO SECTION 12 |
| Field Corn                                  | GO TO SECTION 3  |  |                  |
| Weeds Controlled/Rates of Application       |                  | Skin Colour Enhancement of Red<br>Skinned Potatoes | GO TO SECTION 13 |
| Established Pasture & Rangeland             | GO TO SECTION 5  | Restricted Uses                                    | GO TO SECTION 14 |
| Grass Crops for Forage & Seed               | GO TO SECTION 6  | Precautions  | GO TO SECTION 15 |
| Pre-harvest/Grazing Intervals               | GO TO SECTION 7  | Mixing and Application                             | GO TO SECTION 16 |
| Tank-Mixes                                  | GO TO SECTION 8  | First Aid  | GO TO SECTION 17 |
| Turf Uses - Sod farms, golf courses (roughs | GO TO SECTION 9  | Toxicological Information                          | GO TO SECTION 18 |
| and fairways).                              |                  | Storage  | GO TO SECTION 19 |
| PStubble Fields, Roadsides, Uncropped       | GO TO SECTION 10 | Disposal Information                               | GO TO SECTION 20 |
| Land,                                       |                  |  |                  |
| Airports                                    |                  |  |                  |

#### **DIRECTIONS FOR USE:**

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# **SECTION 1 - SPRING WHEAT, BARLEY, RYE**

**Treatment Stage**: Ground or aerial application. Treat from the 4<sup>th</sup> leaf expanded stage to the early flag leaf (shot blade) stage. (Do not treat crop underseeded to legumes.)

**GO TO SECTION 4** 

## **SECTION 2 - WINTER WHEAT, FALL RYE**

**Treatment Stage**: Ground or aerial application. Treat in the spring from full tillering until the early flag leaf (shot blade) stage. Do not apply to seedling winter cereals in the fall.

**GO TO SECTION 4** 

#### **SECTION 3 - FIELD CORN**

**Treatment Stage:** Ground application only. As an overall spray, before the corn is 15 cm tall (leaf extended) and/or before the 6-leaf stage. Application as an overall spray at later stages will damage the corn. For later applications (corn 15-75 cm, leaf extended), use a shielded spray or a directed spray with drop pipes. Keep spray off corn foliage. Do not apply within 2 weeks of silking and tasselling. A void cultivation for 2 weeks following spraying. Use at least 100L/ha water. Do not add oil or surfactant.

GO TO SECTION 4

## SECTION 4 - WEEDS CONTROLLED AND RATES OF APPLICATION

Apply in warm weather when the crop and weeds are growing well, and the weeds are at a susceptible stage. Avoid application during drought conditions or during exceptionally hot weather.

**Susceptible Weeds:** Annual sow-thistle, Bluebur (up to 4 leaf stage), Burdock (before the 4-leaf stage), Cocklebur, Common Ragweed, Daisy fleabane, False flax, False ragweed, Flixweed, Goat's-beard, Giant ragweed, Kochia, Lamb's-quarters, Mustards (except Dog and Tansy), Narrow-leaved hawk's-beard (susceptible in the fall and at 1-2 leaf stage in the spring), Plantain, Prickly lettuce, Redroot pigweed, Russian pigweed, Russian thistle, Shepherd's-purse, Stinging nettle, Stinkweed, Sweet clover (seedling), Thyme-leaved spurge, Volunteer canola, Wild radish, Wild(prairie)sunflower.

Optimum Stage of Weed Growth: 2 to 4 leaf, growing actively. \*

# **Rates to Use on Susceptible Weeds:**

Small seedlings, good growing conditions: 500 mL/ha Weeds in bud, dry/cold conditions, or heavy infestation: 800 mL/ha

**Harder to Control Weeds:** Curled Dock (up to 4 leaf), Dog mustard, Field pepper-grass, Flixweed (spring prior to bolting), Groundsel, Hairy galinsoga, Hawkweed, Heal-all, Knotweed (up to 4 leaf), Narrow-leaved hawk's-beard (spring prior to bolting), Oak-leaved goosefoot, Pineappleweed, Prostrate pigweed, Purslane, Sheep sorrel, Tansy mustard, Tumble pigweed, Velvetleaf.

Optimum Stage of Weed Growth: 2-4 leaf, growing actively. \*

## **Rates to Use on Harder to Control Weeds:**

Small seedlings, good growing conditions:
Weeds in bud, dry/ cold conditions, or heavy infestations:

900 mL/ha 1.3 L/ha

**NOTE:** These high rates may result in deformities in the crop, but improved weed control should result in higher yields.

## **TOP GROWTH CONTROL ONLY:**

Biennial wormwood, Blue lettuce, Bull thistle, Burdock, Buttercup, Canada thistle, Chicory, Curled dock, Dandelion, Field bindweed, Field chickweed\*, Field horsetail\*, Gumweed, Hedge bindweed, Hemp-nettle\*(treated before the 4-leaf stage), Hoary cress, Lady's-thumb\*, Leafy spurge, Mouse-eared chickweed\*, Perennial sow-thistle, Russian knapweed, Scentless mayweed, Smartweed\*, Tartary buckwheat, Teasel, Volunteer sunflower, Wild buckwheat\*, Yellow rocket (controlled with applications before the 4-leaf stage)

# **Rates of Application Top Growth Control Only:**

Small seedlings, good growing conditions: Large weeds, dry/cold conditions, or heavy infestations: 1.1 L/ha

1.3 L/ha

<sup>\*</sup>Weed control may be reduced when applied beyond optimum stage of weed growth.

<sup>\*</sup>Weed control may be reduced when applied beyond optimum stage of weed growth.

<sup>\*</sup>Use highest rate listed below for suppression only.

**NOTE:** For use in-crop. These rates m ay result in significant injury on some crops and should only be used where some crop injury can be tolerated.

# **Maximum Safe Rates of Application for Crops:**

Spring wheat, barley, rye:

Winter wheat, fall rye:

Field corn:

1.1 L/ha
800 mL/ha
800 mL/ha

Do not exceed the maximum rates in the weed control tables in any crop. Do not apply more than once per year.

**GO TO SECTION 7** 

# SECTION 5 - ESTABLISHED PASTURES, RANGELAND (WITHOUT LEGUMES)

**Treatment Stage:** Ground or aerial application. Apply at a time of rapid growth, usually May, June and/or September. Apply after pasture has been grazed or cut and weed growth has resumed. A second treatment may be required. Do not apply in freshly seeded grasses and pastures until well established. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

Weeds Controlled: As listed in Section 4

Rates to Use: Up to 3.4 L/ha in 100-300 litres of water per hectare.

Use the higher rate for perennial weeds. Do not apply more than twice per year.

GO TO SECTION 7

# SECTION 6 - GRASS CROPS FOR FORAGE AND SEED PRODUCTION (ESTABLISHED STANDS ONLY)

**Treatment Stage:** Ground or aerial application only. Apply in the spring up to the shot-blade stage of the grasses or in the fall after harvest to control annual and biennial weed species.

Weeds Controlled: As listed in Section 4

**Rates to Use:** 0.8–1.6 L/ha in 100-300 L/ha of water.

Do not apply more than twice per year.

**NOTES:** Do not exceed 800 mL/ha on seed crops. Do not apply during pollen development or flowering stage of grass seed crops as seed yields could be reduced. Late germinating weeds, such as red bartsias, may be controlled at 0.8 L/ha rate after the forage crop has been removed if weeds are actively growing.

**GO TO SECTION 7** 

# SECTION 7 - PRE-HARVEST/GRAZING INTERVALS (cereal crops, field corn, forages, pastures and rangeland)

- 1. Do not permit lactating dairy animals to graze fields within 7 days after application.
- 2. Do not harvest forage or cut hay within 30 days after application.
- 3. Withdraw meat animals from treated fields at least 3 days before slaughter.

**GO TO SECTION 15** 

#### **SECTION 8 - TANK MIXES**

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Interprovincial Cooperative Ltd. at 1-204-233-3461 for information before applying any tank mix that is not specifically recommended on this label.

**GO TO SECTION 15** 

# SECTION 9 – TURF USES – SOD FARMS, GOLF COURSES (roughs and fairways only). Use adequate buffer zones to protect sensitive non-target vegetation.

**Treatment Stage:** DO NOT apply by air. Apply at a time of rapid growth, usually May, June, and/or September. Application during drought or when weeds are under stress such as heat or cold will result in poorer control.

Weeds Controlled: See Section 4 for a complete listing.

**Rates of application:** Up to 1.9 litres /ha at each application, maximum of 3.8 litres per year. Apply in 100 to 300 litres of water per hectare.

Do not apply more than twice per year. This does not include spot treatments.

**Application notes:** Do not apply to bentgrass or newly seeded lawns/turf as injury may occur. DO NOT water or apply when rainfall is expected within 24 hours. Avoid application if weather is hot (above 27 deg. C) and/or dry. Avoid mowing within 4 days before and several days after application. This product is only effective when applied to the leaves of actively growing weeds. The product will not prevent new weeds – apply only when weeds are present. DO NOT apply to the exposed roots of trees and ornamentals. If weeds do not warrant a broadcast application (e.g. entire lawn), consider spot treatments that target only weedy areas. Do not allow people (other than the applicator) or pets onto the treated area until the spray has thoroughly dried. Use caution when applying around sensitive plants.

**GO TO SECTION 15** 

# SECTION 10 – STUBBLE FIELDS, ROADSIDES, UNCROPPED LAND AND AIRPORTS

**Treatment Stage:** Ground or aerial application for stubble fields and uncropped land. DO NOT APPLY BY AIR TO ROADSIDES OR AIRPORTS. Treat established pastures only in spring (May and early June) or early September.

Susceptible Weeds: As listed in Section 4.

# **Rates of Use on Susceptible Weeds:**

| Young Weeds: | 1.50 L/ha |
|--------------|-----------|
| Older Weeds: | 2.35 L/ha |

**Harder to Control Weeds:** As listed in Section 4.

#### **Rate to Use on Harder to Control Weeds:**

2.35 L/ha

Do not apply more than twice per year.

**NOTES:** Spray thoroughly using 100 to 200 litres of water per hectare.

Use the higher rate for perennial weeds, a second treatment may be required. Cultivating grain stubble and spraying after regrowth may aid in control.

Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

**GO TO SECTION 15** 

# SECTION 11 - WEEDS & BRUSH ON NON-CROP / NON-GRAZED LAND

**Susceptible Species:** Consult provincial spray calendars for a list of susceptible species. Ground or aerial application.

Rates to Use: 3.25 - 6.80 L/ha

Use the lower rate for species that are more susceptible such as chokecherry, western snowberry, and willow.

Rate of Carrier: Use sufficient water to wet foliage thoroughly, 800 - 1600 L/ha for ground application. Depending on the density of the brush, 1000 to 3000 L of spray solution may be required per hectare if applying by ground. For aerial applications use 55 to 165 litres of spray solution per hectare. For oil/water carrier, use 15 litres of oil mixed in 40 litres of water with continuous agitation.

#### **Maximum Rates:**

# **Annual and perennial weed control:**

3.4 L/ha

Do not apply more than twice per year.

## **Woody plant control:**

6.80 L/ha

Do not apply more than twice per year.

**Notes:** Spray brush species up to 3 metres tall after foliage is well developed. Applications soon after leaves are fully open usually give the best results. Apply sufficient spray volume to thoroughly wet all plant parts to the ground line. Brush or trees above 3 m tall should be cut close to the ground and sprayed when the re-growth is over 0.6 m tall. With good growing conditions and adequate soil moisture, sprays may be applied up to 2 to 3 weeks before normal frost time.

**GO TO SECTION 15** 

#### SECTION 12 - BASAL BARK AND STUMP TREATMENT – BRUSH/TREES

Susceptible Species: Hard to kill woody brush and young tree species.

Rates to Use: 2.5 Litres in 100 Litres of diesel fuel. Spray to run-off.

Do not apply more than twice per year.

**Notes:** Apply to the basal stems of standing brush and young trees any time of the year prior to formation of corky bark. To prevent re-growth of stumps, treat immediately after cutting by spraying or painting on exposed bark, roots and cut surfaces. Thorough drenching is essential.

**GO TO SECTION 15** 

# SECTION 13 – SKIN COLOUR ENHANCEMENT – RED SKINNED POTATOES

| Crop:                             | RED SKINNED POTATOES (i.e. for skin colour enhancement            |  |  |  |  |
|-----------------------------------|---|--|--|--|--|
| Crop.                             |   |  |  |  |  |
|                                   | of red skinned potatoes grown for fresh market)                   |  |  |  |  |
| Rate to Use:                      | 118.9 mL per ha (78.5 g a.e./ha)                                  |  |  |  |  |
| <b>Number of Applications:</b>    | 2 applications per year   |  |  |  |  |
| Application                       | The first application at pre-bud stage and the second application |  |  |  |  |
| Timing/Interval:                  | at 10-14 days after the first application.                        |  |  |  |  |
| Application Method:               | Broadcast foliar by ground only                                   |  |  |  |  |
| Spray Volume:                     | 50 – 250 L spray solution per hectare                             |  |  |  |  |
| Pre-Harvest Interval:             | 24 days   |  |  |  |  |
| Geographical Use Zones:           | National  |  |  |  |  |
| <b>Additional Use Directions:</b> | Application of this herbicide on potatoes may result in crop      |  |  |  |  |
|                                   | injury, but tuber yield should not be affected.                   |  |  |  |  |

**GO TO SECTION 15** 

# **SECTION 14 - RESTRICTED USES NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.

#### **RESTRICTED USE:**

#### FOREST AND WOODLAND MANAGEMENT NATURE OF RESTRICTION:

This product is to be used only in the manner authorized. Consult local pesticide regulatory authorities about use permits that may be required.

## **CONIFER RELEASE - AERIAL APPLICATION:**

To control hardwood species in stands of fir, hemlock, spruce and pine regeneration, apply Co-Op 2,4-D Ester 700 Herbicide at 3.63 to 4.7 L/ha in 30 to 80 L/ha of total spray mixture. Use water or an "oil-water"\* mixture. Never allow any water or mixture containing water to get into the Co-Op 2,4-D Ester 700 Herbicide or the oil spray premix. Note: Co-Op 2,4-D Ester 700 Herbicide in water or oil- water sprays form an emulsion, not a solution, and separation may take place unless sprays are agitated continuously until used up. Mechanical agitation is recommended.

To prevent conifer damage, delay spraying until all new conifer growth has hardened off, when the terminal buds feel sharp to touch. Caution should be taken to ensure that the conifer is not in a second phase of active or "lammas" growth in late summer. Hardwoods should not have commenced fall coloration. Control of heavy suckering species such as maple, trembling aspen and balsam poplar may only be partial. Raspberries will not be controlled and may, if present, proliferate following removal of the hardwood overstory.

#### FOREST SITE PREPARATION – AERIAL APPLICATION:

To control mixed hardwood species on sites to be planted to conifers, use 4.7 to 6.78 litres of Co-Op 2,4-D Ester 700 Herbicide in 30 to 100 litres of total spray mixture per hectare. Apply as a uniform spray when the foliage is well developed and the brush is actively growing. Under conditions of good growth and high soil moisture, sprays can be used 2 to 3 weeks before normal frost time. For best results use a 10% oil-water\* mixture. NOTE: When preparing sites for planting do not plant conifers before spraying as the conifers present at the time of spraying may be injured or killed. To reduce potential drift hazard on non-crop locations, a drift control agent may be added. Follow all directions on the drift control agent label for the correct mixing sequence.

Do not apply more than twice per year.

\*To prepare the "oil-water" mixture add the Co-Op 2,4-D Ester 700 Herbicide to the oil in a separate container. With vigorous agitation 1 litre of Co-Op 2,4-D Ester 700 Herbicide will emulsify up to 10 litres of oil in 100 litres of spray mixture. Start running the water into the empty spray tank, then slowly add the premix with continuous agitation. All the premix should be in the tank by the time 1/3 of the water is in. If the premix is put in the tank without any water, the first water added may form a thick "invert" (water in oil) emulsion, which will be hard to break.

# **USE PRECAUTIONS:**

With aircraft, uniform coverage can be obtained and drift minimized by using 235 kPa spray pressure or less at the nozzle, using nozzles directed straight back, using a spray boom no larger than <sup>3</sup>/<sub>4</sub> the wing span of the aircraft and by spraying when wind velocity is less than 8 km/h.

## **SECTION 15 - PRECAUTIONS**

**HANDLING PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.** Avoid contact with eyes, skin and clothing. Avoid inhaling vapours or mist. Fatal or poisonous if swallowed. Potential skin sensitizer. Causes skin irritation. DO NOT get on skin.

Protective Clothing and Equipment: Handling the concentrate (mixing and loading): wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. When handling more than 265 kg a.e. (402 L) per day, workers must also use a closed system.

Handling the dilute spray solution (during application or repairing or cleaning equipment): wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Gloves are not required during application when applicator is in an enclosed tractor or an enclosed airplane cockpit. Mixers/loaders/applicators using mechanically pressurized handgun must wear a respirator if they will be handling more than 5 kg a.e. (7.58 L) per day. DO NOT handle more than 8 kg a. e. (12.1 L) per day. Operator use precautions: Wear freshly laundered clothing and clean protective equipment daily. Rinse gloves before removal. Wash hands before eating, drinking, using tobacco or using the toilet. If herbicide penetrates clothing remove immediately, then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. After using this product, remove clothing and launder separately and promptly, and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry. After work, remove all clothing and shower using soap and water.

**GENERAL PRECAUTIONS:** Handle with care and mix only in a closed container. Use only in a well-ventilated area.

Clean spray equipment thoroughly after use.

**RE-ENTRY INTERVAL:** Do not enter treated areas within 12-hours after application.

#### **ENVIRONMENTAL PRECAUTIONS:**

This product contains a petroleum distillate, which is toxic to aquatic organisms.

Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

This product will harm other broadleaved plants in the vicinity of the treatment area. If applying this product using a handheld sprayer, do not directly spray or allow the spray to drift onto ornamentals or gardens.

Do not spray exposed roots of trees and ornamentals.

# Leaching

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

#### Run-off

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with moderate to steep slope, compacted soil or clay.

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

To prevent run-off, avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

**RESISTANCE MANAGEMENT RECOMMENDATIONS:** For resistance management, Co-Op 2,4-D Ester 700 Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Co-Op 2,4-D Ester 700 Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance- management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of Co-Op 2,4-D Ester 700 Herbicide or other Group 4 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other

- fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Interprovincial Cooperative Ltd. at 1-204-233-3461

**GO TO SECTION 16** 

#### **SECTION 16 - MIXING AND APPLICATION**

- 1. Fill tank 1/2 full with water. Start agitation.
- 2. Add Co-Op 2,4-D Ester 700 Herbicide.
- 3. When tank-mixes are used, consult the tank-mix product label for full mixing instructions.
- 4. Complete filling of tank.
- 5. Use 50-200 litres of water per hectare for ground application unless otherwise specified or on tank-mix product labels.
- 6. Do not exceed 275 kPa pressure for ground application.
- 7. TRANSFER SYSTEM: FOR CONTAINERS LARGER THAN 20 L: Use a transfer system that avoids open pouring when transferring the liquid concentrate from such containers into the spray tank.

**Field Sprayer Application:** DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE 572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

**Aerial Application:** DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE 572.1) coarse classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices. No human flaggers are permitted.

#### **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good pra11134ctice specific to aerial application, as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions: Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of pre-mixed chemicals with a closed system is permitted. It is desirable that the pilot has communication capabilities at each treatment site at the time of application. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls, and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

# **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-204-233-3461 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

For application to rights-of-way, spray buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies that minimize off-site drift, including meteorological conditions (e.g. wind direction, low wind speed) and spray equipment (e.g. coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified spray buffer zones for protection of sensitive aquatic habitats.

For the use of the herbicide in site preparation and conifer release in forestry, terrestrial buffer zones are not required.

## **Spray Buffer Zones**

A spray buffer zone is NOT required for:

• uses with hand-held application equipment permitted on this label.

Seasonal water bodies require spray buffer zones if there is water in them during application. Water bodies which do not fill on an annual basis need not be buffered.

**BEFORE AERIAL APPLICATION TO FORESTS** consult the most recent provincially approved topographic maps of the area to be treated (1:50 000) or more up-to-date information (e.g. GPS systems) to identify sensitive aquatic habitats.

Sensitive aquatic habitats include:

(a) All running and standing water bodies, including impoundments, beaver ponds and bog

ponds, that appear on the map or GPS system;

(b) Running and standing water bodies that do not appear on the map or GPS system, but are visible from the air.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), and estuarine/marine habitats.

|                       | Сгор   |                               | Spray Buffer Zones (metres) Required for the Protection of: |                     |   |                     |                        |     |
|-----------------------|--|-------------------------------|---|---------------------|---|---------------------|------------------------|-----|
| Method of Application |  |                               | Freshwater<br>Habitat of Depths:                            |                     | Estuarine/Marine<br>Habitats of Depths: |                     | Terrestrial<br>Habitat |     |
|                       |  |                               | Less<br>than 1 m  | Greater<br>than 1 m | Less<br>than 1 m                        | Greater<br>than 1 m |                        |     |
| Field<br>Sprayer      | Turf Uses – Sod Farms, Golf Courses (roughs and fairways only).  |                               | 1   | 0                   | 1                                       | 0                   | 1                      |     |
|                       | Field crops**  |                               |   | 1                   | 1                                       | 1                   | 1                      | 1   |
|                       | Fallow land and crop stubble, pastures, rangeland, non-crop / non-grazed land (including roadsides, rights-of-way***, and brush control) |                               |   | 1                   | 1                                       | 1                   | 1                      | 2   |
|                       | Field Crops**  |                               | Fixed wing  | 10                  | 0                                       | 1                   | 0                      | 45  |
|                       |  |                               | Rotary wing   | 10                  | 0                                       | 1                   | 0                      | 40  |
|                       | Fallow land and crop stubble, pastures, rangeland  |                               | Fixed wing  | 15                  | 0                                       | 1                   | 0                      | 60  |
|                       |  |                               | Rotary wing   | 15                  | 0                                       | 1                   | 0                      | 50  |
|                       | Non-cropland<br>(including<br>roadsides,<br>rights-of-<br>way***, and<br>brush control)  | 3.4 L/ha (2.24<br>kg a.e./ha) | Fixed wing  | 70                  | 0                                       | 1                   | 0                      | 150 |
| Aerial                |  |                               | Rotary wing   | 35                  | 0                                       | 1                   | 0                      | 80  |
|                       |  | 6.8 L/ha (4.48<br>kg a.e./ha) | Fixed wing  | 125                 | 1                                       | 15                  | 1                      | 225 |
|                       |  |                               | Rotary wing   | 50                  | 1                                       | 5                   | 1                      | 100 |
|                       | Forestry<br>(Conifer release<br>and forest site<br>preparation)  | 3.6 L/ha (2.4<br>kg a.e./ha)  | Fixed wing  | 175                 | 0                                       | 1                   | 0                      | NR  |
|                       |  |                               | Rotary wing   | 95                  | 0                                       | 1                   | 0                      | NR  |
|                       |  | 4.7 L/ha (3.1 kg a.e./ha)     | Fixed wing  | 225                 | 1                                       | 1                   | 0                      | NR  |
|                       |  |                               | Rotary wing   | 125                 | 1                                       | 1                   | 0                      | NR  |
|                       |  | 6.8 L/ha (4.48                | Fixed wing  | 350                 | 1                                       | 20                  | 1                      | NR  |
|                       |  | kg a.e./ha)                   | Rotary wing   | 175                 | 1                                       | 10                  | 1                      | NR  |

NOTE: The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website \*\* Field crops include: cereal grains (spring wheat, barley, rye, winter wheat, fall rye), field corn, and grass crops for forage and seed production.

**GO TO SECTION 17** 

<sup>\*\*\*</sup> Spray buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way. When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

- 1. In case of poisoning, call a physician or poison control centre IMMEDIATELY.
- 2. **If on skin or clothing**, take off contaminated clothing. Rinse skin IMMEDIATELY with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
- 3. **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 centre or doctor for treatment advice.
- 4. **If swallowed**, call a poison control centre or doctor IMMEDIATELY for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.
- 5. **If inhaled**, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
- 6. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**GO TO SECTION 18** 

## **SECTION 18 - TOXICOLOGICAL INFORMATION**

No specific antidote. Treatment of any systemic intoxication should be primarily symptomatic and supportive. Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Do not induce vomiting. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle co-ordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea.

**GO TO SECTION 19** 

#### **SECTION 19 – STORAGE**

Store this product away from food or feed. Keep in original container during storage. May be stored at any temperature. SHAKE WELL BEFORE USING.

**GO TO SECTION 20** 

#### **SECTION 20 – DISPOSAL**

**For Recyclable Containers:** DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

For Returnable Containers: DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

**For Refillable Containers:** For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. DO NOT reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean up of spills.

# **NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.