87.09.08

# CLEAN CROP

For-Ester

E.C. Forestry Herbicide

Restricted

WARNING POISON

Controls Deciduous Species in Forests And On Non-Crop Land

contains 2,4-D

READ THE LABEL BEFORE USING

REGISTRATION NO. 16675 PEST CONTROL PRODUCTS ACT

GUARANTEE:

2,4-D acid ..... 470 g/L (present as iso octyl ester)

NET CONTENTS: 20L

YELLOWSTONE AGRI PRODUCTS 12080 HORSESHOE WAY RICHMOND, B.C. V7A 4V5

# DIRECTIONS FOR USE

GENERAL DIRECTION: Add FOR-ESTER in the amount of clean water or oil required for even distribution. Spray at low pressure (200-300 kPa) during warm weather when weeds and brush are young and growing actively. Soil moisture should be adequate for normal growth.

# TO PREPARE A SPRAY

WATER: Add half the required amount of water to the empty tank.

Add some of the For-Ester E.C. while mixing and finally the balance of the water with continued mixing. Keep mixing to make a uniform spray.

OIL: When For-Ester E.C. is to be used in oil, do not let water get into the product or spray tank. Add some of the oil carrier to the tank. Then add the For-Ester E.C. needed and the rest of the oil. Moderate by-pass mixing will give a stable solution.

OIL WATER MIXTURE: With vigorous agitation, 1.2 L of For-Ester E.C. will emulsify up to 10L of oil in 100L of spray mixture. First premix the For-Ester E.C. and oil in a separate container. Never allow any water or mixtures containing water to get into the For-Ester E.C. or the oil spray premix. Start running the water into empty sprayer 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.

NOTE: For-Ester E.C. in water or oil water sprays forms an emulsion, not a solution, and separation may take place unless sprays are agitated continuously until used up. Mechanical agitation is recommended.

Use only Diesel Oil, No. 1 or No. 2 Fuel Oil or Kerosene where oil is recommended in the spray mixture.

WOODLANDS MANAGEMENT (500ha or less)

GROUND APPLICATION: Apply 100 - 200 L/ha of spray solution depending on the type of application equipment used. Use sufficient water for even distribution. Spray at low pressures (200-275 kPa) when the weeds are actively growing. For cluster nozzles use pressures of 150-225 kPa.

CONIFER RELEASE (Ground Application): To control the growth of undesirable hardwood species including alder, balsam, poplar, trembling aspen, birch, elm, cherry, hazelnut, sumac, Manitoba maple, thimbleberry and willow in stands of fir, hemlock, spruce and pine, use 5.1-6.6L/ha of FOR-ESTER in 100-200 L/ha of total spray mixture. Use a water or an "oil-water" mixture and follow the mixing directions on the label under the directions "TO PREPARE A SPRAY". Rates higher than 6.6 L/ha may cause conifer injury. Use the lower rate in stands of pine. To prevent conifer injury damage delay spraying until all new conifer growth has hardened off, when the terminal buds feel needle sharp to touch. In Eastern Canada this period is from mid-July until the end of August and in Western Canada this period is from the end of June until the end of August. Caution should be taken to ensure that the conifer is not in a second phase of active or "lammas" growth in late summer.

For an early spring treatment in B.C. use 5.1-6.6 L/ha of FOR-ESTER with oil as a dormant spray. To ensure good coverage and reduce the possibility of conifer injury, apply in 100-200 L/ha of total spray mixture before "bud burst" of both the conifers and undesirable hardwood species to be suppresses.

SITE PREPARATION (Ground Application): To control mixed hardwood species on sites to be planted to conifers, use 6.6-10.2 L/ha of FOR-ESTER in 100-200 L/ha of total spray mixture. Apply as a uniform spray when the foliage is well developed and the brush is growing actively. Under conditions of good growth and high soil moisture, sprays can be used 2-3 weeks before normal frost time. For best results use a 10% oil solution and follow the "oil-water" mixing directions on the label under the directions "TO PREPARE A SPRAY".

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.

FOLIAGE TREATMENT (ground application): Spray wood growth up to 2.0-2.5 m tall after foliage is well developed using a drenching spray containing 9L of For-Ester C.C./1000L of water. Some taller brush can be sprayed successfully, although in some cases basal bark or stump treatment is preferable. Poison ivy, some brambles and certain other susceptible species may be controlled by using 6 L/1000 L of water. Coverage should be complete and all parts of the plants including foliage, shoot, stems and bark, should be wet with spray. Best results usually will be obtained from applications made soon after maximum foliage development in the spring. Less effective control may result during prolonged hot, dry weather. With good growing conditions, applications may be made up to 2 to 3 weeks before normal frost time. Power equipment with pressures up to 1750 kPa will aid in obtaining satisfactory spray coverage. Repeat applications may be necessary as new growth develops.

STUMP TREATMENT: Where growth is more than 2.0-2.5 m tall cut it close to the ground and spray the stumps and stubs. Use a

solution of 36 L of For-Ester E.C. in 1000 L of diesel oil, fuel oil or kerosene, mixed thoroughly. All exposed bark, as well as cut surfaces should be wet thoroughly. This means spraying until run-down or run-off to the ground line is noticeable. Old or rough bark requires more spray volume than young or smooth bark. Apply at any time, including the winter months, preferably to freshly cut stumps. Best results are usually obtained on stumps 5 cm across or larger. Trash from brush cutting operations such as sawdust, leaves and branches, etc... should be removed from the base of the stumps before chemical is applied.

BASAL BARK TREATMENT: Brush and small trees can be controlled by spraying the basal parts of brush stems and tree trunks to a height of 60 cm from the ground line (low thick brush may be treated with an over all spray). Use a solution of 36 L of For-Ester E.C. in 1000 L of diesel oil, fuel oil or kerosene. With certain species, 24 L of For-Ester E.C. in 1000 L of diesel oil, fuel oil, or kerosene is effective. Knapsack or power equipment may be used but complete wetting of the indicated area is necessary particularly at the ground line. This means spraying until run-down, or run-off to the ground line is noticeable. Old or rough bark requires more spray volume than young or smooth bark. Low pressures are desirable. Apply at any time including winter months. Often delayed response killing can be expected. Treated brush or trees preferably should not be cut for a period of 1 year following application.

"FRILL" TREATMENT: For large trees, make a single hack girdle or "frill" or over-lapping axe cuts as close to the ground as possible. Treat the injured area with a mixture of 36L of For-Ester E.C. in 1000 L of oil.

FOR GENERAL WEED CONTROL IN SMALL AREAS: 30 mL (2 tbsp) of FOR-ESTER in 10L of oil or water is approximately equivalent to 3L/1000L.

ROADSIDE AND GENERAL WEED CONTROL: For taller weed growth, such as in vacant lots on roadsides and along fence rows, sufficient sprays should be used to wet all foliage. Use at the rate of 4.5L in 1000L of water. Deep rooted perennial weeds such as bindweed and Canada thistle may require repeated applications as new growth appears.

WOODY PLANTS: To control 2,4-D susceptible species, spray brush up to 2.0-2.5m tall after foliage is well developed with 7.8L in 1000L of water. Using a high pressure spray (1050-1400 kPa) wet thoroughly all parts of the plants, including foliage, shoots, stems and bark. With good growing conditions and high soil moisture, sprays may be used up to 2 or 3 weeks before normal frost time, but spraying soon after leaves are fully open in the spring usually gives best reaults. Control may be less effective during hot, dry weather when deep soil moisture is deficient.

#### RESTRICTED USE

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

NATURE OF RESTRICTION: This product is to be used only in the manner authorized. Contact local authorities regarding appropriate use permits that my be required.

## WOODLANDS & FORESTRY MANAGEMENT

Ground/Aerial application for sites greater than 500 ha (forestry use).

Aerial application for sites 500 ha or less (woodlands use). Ground Application:(Broadcast boom sprayer). Apply 200-400 L/ha of spray solution depending on the type of application equipment used. Use sufficient water for even distribution. Spray at low pressures (200 - 275 kPa) when the weeds or brush are actively growing. For cluster nozzles use pressures of 150 - 225 kPa.

Aerial Application:(Including fixed and rotary wing aircraft). Apply 30 - 100 L/ha of spray solution dopending on the type of application system being used. Use boom pressures of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices.

CONIFER RELEASE: To control the growth of undesirable hardwood species, including alder, balsam, poplar, trembling aspen, birch, elm, cherry, hazelnut, sumac, Manitoba maple, thimble berry and willow in stands of fir, hemlock, spruce and pine. Use 5.1-6.6 L/ha of FOR-ESTER. Use a water or an "oil-water mixture" and follow the mixing directions on the label under the directions "TO PREPARE A SPRAY". Rates higher than 6.6 L/ha may cause conifer injury. Use the lower rate in stands of pine. To prevent conifer damage, delay spraying until all new conifer growth is hardened or when the terminal buds feel needle sharp to touch. In Eastern Canada, this period is from mid July until the end of August, and in Western Canada, this period extends from the end of June until the end of August. Caution should be taken to ensure that the conifer is not a second or "lammas" growth in late summer.

For an early spring treatment in B.C. use 5.1 - 6.6 L/ha of FOR-ESTER with oil as a dormant spray. To ensure good coverage and reduce possibility of conifer injury apply before "Bud burst" of both the conifers and undesirable hardwood species to be suppressed.

SITE PREPARATION: To control mixed hardwood species on sites to be planted to conifers, use 6.6 - 10.2 L/ha of FOR-ESTER. Apply as a uniform spray when the foliage is well developed and the brush in growing actively. 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 solution and follow the "oil water" mixing directions on the label under the directions "TO PREPARE A SPRAY".

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.

AERIAL APPLICATION - FOLIAGE TREATMENT: Use 10.2 L/ha of For-Ester. The volume of spray required per hectare will depend upon location, species, density, swath width and equipment. The spray operator should select the volume that will give adequate distribution and coverage. Read directions "TO PREPARE A SPRAY" Apply after foliage is fully developed. before mixing. Repeat treatment should be applied in accordance with local recommendations. Consult local authorities regarding amount of For-Ester required in your area. Note: "Do not spray in winds exceeding 8 km/h. Do not spray in dead calm near sensitive plants. The cloud of suspended droplets may drift onto sensitive plants when the wind comes up. Spray only when wind is blowing away from sensitive crop, shelterbelt or garden."

USE PRECAUTIONS: With aircraft, uniform coverage can be obtained and drift minimized by using 150-200 kPa spray pressure at the nozzle by using straight stream nozzles directed straight back, by using a spray boom no longer than 3/4 the wing span of the aircraft and by spraying when wind velocity is less than 8 km/h.

## PRECAUTIONS

Do not apply 2,4-D directly to or otherwise permit it to come into contact with vegetables, flowers, grapes, fruit trees, ornamental or other desirable plants which are sensitive to 2,4-D and its formulations and do not permit spray mists to drift onto them, since even minute quantities of the spray may cause injury both growing and dormant periods. (Coarse sprays are less likely to drift.) Accordingly, application by airplane, ground rigs and hand dispensers should be carried out only where there is no hazard from drift. Do not apply by airplane in the vicinity of grapes or other desirable 2,4-D susceptible vegetation. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby. Excessive amounts of this weedkiller may temporarily inhibit seed germination or plant growth.

To avoid contamination of water do nota ply along any creeks or rivers or along ditches draining to areas from which water may be used for drinking or irrigation purposes. Do not use around homes, lawns or other such recreational areas or in such a way as to contaminate drinking water or food. Authorities of parks, golf courses, or other recreational areas may use this product for poison ivy control provided the area is posted POISON IVY KEEP AWAY.

To avoid injury to desirable plants, do not store, handle or apply other agricultural chemicals with the same containers or equipment used for 2,4-D. Do not store near fertilizers, seeds, insecticides or fungicides. Be sure that use of this product conforms to all applicable regulations.

LOCAL CONDITIONS MAY AFFECT THE USE OF HERBICIDES. PROVINCIAL AUTHORITIES ISSUE RECOMMENDATIONS TO FILL LOCAL CONDITIONS.

If this product is exposed to temperatures of minus 15'C it should be warmed to at least 5'C and mixed thoroughly before using.

#### FIRST AID:

In case of poisoning, call a physician immediately. IF ON SKIN, remove contaminated clothing and wash skin thoroughly with soap and water. IF IN EYES, flush with water for 5-10 minutes and obtain medical attention. IF SWALLOWED, DO NOT INDUCE VOMITING, but rush the patient to the nearest hospital or doctor's office, taking the pesticide container with you.

DECONTAMINATION AND DISPOSAL:

- 1. Rinse the emptied container thoroughly and add the rinsing to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the manufacturer.

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

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or property arising from the use of handling of this product and accepts the product on that condition.

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