

# LO-VOL 4

## SOLVENTLESS HERBICIDE

**TENKÖZ**<sup>®</sup>  
SERVING AGRICULTURE

**Solventless Ester Formulation For Agricultural Weed Control,  
Conifer Release, Site Preparation, Turf And Non-cropland Weed Control.**

**ACTIVE INGREDIENT:**

2,4-Dichlorophenoxyacetic acid, isooctyl (2-ethylhexyl) ester ..... 62.6%\*

**INERT INGREDIENTS:** ..... 37.4%  
100.0%

\*2,4-Dichlorophenoxyacetic acid equivalent 41.5% or 3.8 pounds per gallon. Isomer specific by AOAC method No. 978.05

EPA Reg. No. 71368-14-55467

EPA Est. No. 228-IL-1

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Inside for Additional Precautionary Statements.

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300**

**FIRST AID**

<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.</p>	
<b>NOTE TO PHYSICIANS</b>	
<p>No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.</p>	

Manufactured For:

**TENKÖZ Inc.**

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Alpharetta, GA 30022

071368-14-55467. 20031023. Iv4sh

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Harmful if swallowed, absorbed through the skin or inhaled. Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eye wear.

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.

**For containers over 1 gallon but less than 5 gallons,** mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

**ENGINEERING CONTROL 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 (personal protective equipment) may be reduced or modified as specified in the WPS.

**For containers of 5 gallons or more,** a mechanical system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide containers 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.

**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.

**ENVIRONMENTAL HAZARDS**

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

Do not apply when weather conditions favor drift from treated areas. Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate water used for irrigation or domestic purposes.

Do not apply Tenkoz Lo-Vol 4 Solventless Herbicide directly to, or permit spray mist to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application.

Use coarse sprays to minimize drift. Do not apply with hollow cone type insecticide or other nozzles that produce fine spray droplets.

**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 valuable plants.

At high air or ground surface temperatures, vapors from this product may injure susceptible plants.

**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 entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and 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 entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water is: coveralls, waterproof gloves, shoes plus socks and protective eye wear.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not allow people (other than applicator) or pets on treatment area during application.

Do not enter treatment areas until sprays have dried.

## STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food or feed by storage or disposal. Store in original container in a dry, secured storage area. Keep container tightly closed when not in use.

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

**CONTAINER DISPOSAL:** Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## GENERAL INFORMATION

Tenkos Lo-Vol 4 Solventless Herbicide contains the isooctyl (2-ethylhexyl) ester of 2,4-D, the original and one of the best low volatile esters. In cropland, this herbicide is more effective than amines for controlling hard-to-kill weeds such as bindweed, thistles, smartweeds, wild garlic, curled dock, tansy ragwort and wild onions.

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product 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 crop tolerance to 2,4-D consult your seed company, state Agricultural Extension Service or qualified crop consultant for advice.

### GENERAL PRECAUTIONS AND RESTRICTIONS

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

Do not use in or near a greenhouse.

### MIXING INSTRUCTIONS

Add one-half the required amount of water to the spray tank, then add the Tenkoz Lo-Vol 4 Solventless Herbicide with agitation, and finally, the balance of the water with continued agitation. This material forms an emulsion in water, not a solution. This tends to separate on standing. Provide agitation to prevent such separation and insure uniform spray mixtures.

### COMPATIBILITY

If this product is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, geographic and other restrictions.

### COMBINATION WITH LIQUID NITROGEN FERTILIZER

Use 1/2 to 3/4 pint Tenkoz Lo-Vol 4 Solventless Herbicide per acre for weeding and feeding corn, cereal grains, grasses for seed production or grass pastures as directed on this label. Use the fertilizer at rates recommended by supplier or Extension Service Specialist. Fill the spray tank about half full with the liquid fertilizer, then add the Tenkoz Lo-Vol 4 Solventless Herbicide with vigorous agitation, and complete filling the tank with fertilizer. Apply immediately and continue agitation in the spray tank during application. Application during very cold weather (near freezing) is not advisable. Do not allow mixture to stand overnight. Incompatibility may be encountered with some fertilizer brands or under some environmental conditions. If in doubt, test a small sample in the dilution ratio planned for application.

**NOTE:** Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentration will reduce the hazard of leaf burn.

### GENERAL WEED LIST

#### ANNUAL AND BIENNIAL WEEDS

annual yellow sweetclover	knotweed*	smartweeds* (annual species)
beggarticks*	mallow* (venice, dwarf, little)	sowthistle (annual or spiny)
bull thistle	marshelder	sunflower
coffeeweed	morningglory (common, ivy, woolly)	velvetleaf
common evening primrose	mustards (except blue mustard)	vervains*
common broomweed*	pepperweeds (except perennial)	vetches
common burdock	pigweeds** (Amaranthus spp.)	wild carrot*
common cocklebur	prickly* lettuce	wild lettuce
common lambsquarters	ragweed (common giant)	wild parsnips
croton (Texas or woolly)	rough fleabane	wild radish
hairy galinsoga	Russian thistle*	
jimsonweed	salsify (western or common)	

*(continued)*

## GENERAL WEED LIST *(continued)*

### PERENNIAL WEEDS

alfalfa*	dogbanes*	nettles* (including stinging)
bindweed* (hedge, field & European)	goldenrod*	plantains
blue lettuce	ground ivy*	sowthistle (perennial)
Canada thistle*	hawkweed* (orange)	tansy ragwort*
catnip	healall	vervains*
chicory	hoary cress*	western ironweed*
dandelion	Jerusalem - artichoke	wild garlic*
docks*	many-flowered aster*	wild onion*

\*These species may require repeat applications and/or use of the higher rate recommended on this product label even under ideal conditions for application.

\*\*Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

### SPECIFIC USE DIRECTIONS CEREAL GRAINS

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>WHEAT, BARLEY and RYE</b> (not underseeded with legumes)  <b>Postemergence</b> Annual and biennial weeds Perennial broadleaf weeds	1/2 to 2 pints* 1 to 2 pints*	Apply after grain is fully tillered (usually about 4 to 8 inches high) but not forming joints in the stem. <b>Do not spray grain in boot to dough stage.</b>
<b>Wild onion or garlic</b>	1-1/2 to 2 pints*	Apply 1-1/2 pints when grain is fully tillered and wild garlic or onion plants are small. Apply 2 pints after harvest in the crop stubble. For control of new fall growth of wild onion or garlic refer to FALLOWLAND use directions.
<b>Preharvest</b>	1 to 2 pints*	Apply when grains are in the hard dough stage to suppress large weeds that may interfere with harvest. Best results will be obtained when soil moisture is sufficient to induce succulent weed growth.

\*Use the lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the risk of grain damage. Do not apply to grain in the seedling stage.

#### RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS

For aerial application on grain, apply this product in 2 or more gallons of water per acre.

For ground application, a minimum of 10 to 15 gallons of water per acre is recommended for proper spray coverage.

Do not mix with oil for crop uses.

Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 2 weeks after treatment.

Do not feed treated straw to livestock if a preharvest treatment as described above is applied.

## TANK MIXTURES FOR CEREAL GRAINS

### Tenkoz Lo-Vol 4 Solventless and BUCTRIL® Tank Mixture on Wheat, Barley and Rye

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Cereal Areas except Washington, Oregon, Idaho, Colorado, Wyoming and Montana	1/2 to 1 pint plus 1 to 1-1/2 pints BUCTRIL®	BUCTRIL® Broadleaf Herbicide will control some annual weeds that are resistant to Tenkoz Lo-Vol 4 Solventless Herbicide and may be tank mixed for broader spectrum weed control on cereal grains.
Washington, Oregon, Idaho, Colorado, Wyoming and Montana	1/2 to 1 pints plus 1-1/2 pints BUCTRIL®	<b>TO PREPARE THE SPRAY:</b> First mix Tenkoz Lo-Vol 4 Solventless Herbicide in water then add the BUCTRIL®. Use the higher rates for larger weeds or where weed growth is slow due to dry or cold weather. Apply before weeds are 6 inches high. Use 10 to 20 gallons total spray volume per acre with ground equipment or use 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds.

## FIELD CORN

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Preplant</b>	1 to 2 pints	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn. Apply 7 to 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for control of less susceptible weeds or cover crops such as alfalfa.
<b>Preemergence</b>	2 to 4 pints	To control broadleaf weeds and suppress annual grasses, apply 3 to 5 days after planting, but before corn emerges. Use high rate on soil high in organic matter. Do not use on light, sandy soil or where soil moisture is inadequate for normal weed growth.
<b>Postemergence</b> Annual broadleaf weeds	1/2 pint	Avoid spraying just after corn leaves unfold, as injury may occur. Apply when weeds are small and corn is less than 8 inches tall. If corn more than 8 inches tall must be sprayed, use drop pipes.
Perennial broadleaf weeds	3/4 pints	Spray when weeds are in the bud to bloom stage. If corn is more than 8 inches tall, use drop pipes to keep spray off corn leaves. <b>Do not spray when corn is in tassel to dough stage.</b> 2,4-D may make corn brittle. Winds or cultivation may cause stalk breakage while brittle.
<b>Preharvest</b>	1 to 2 pints	After the hard dough (denting) stage, to suppress weeds that interfere with harvest such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower and velvetleaf, and to decrease production of weed seeds, spray with air or ground equipment. The high rate will be needed for tough weeds under stress.

**POPCORN\***

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Preharvest	1 to 2 pints	After the dent stage to suppress weeds that interfere with harvest, such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower and velvetleaf, and to decrease production of weed seeds, spray with air or ground equipment. The high rate will be needed for weeds under stress. DO NOT USE IN CALIFORNIA.

**RESTRICTIONS AND LIMITATIONS FOR USE ON FIELD CORN AND POPCORN**

Do not forage or feed corn fodder for 7 days following application.

A minimum application volume of 3 to 5 gallons per acre by air or 10 gallons per acre by ground is recommended.

**Note:** Hybrids vary in response to 2,4-D and some are easily injured. Contact seed company or your Agricultural Experiment Station or Extensional weed specialists for this information.

\*Not currently registered in California.

**SOYBEANS (Preplant Only)\***

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Postemergence	3/4 to 1 pint	Apply not less than 7 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present. Some weeds may require repeat treatment for adequate control (see GENERAL WEED LIST and below).
	> 1 to 2 pints	Apply not less than 30 days prior to planting soybeans, when weeds are actively growing. Some weeds may require repeat treatment for adequate control (see GENERAL WEED LIST and below).
		In addition to those weeds found on the GENERAL WEED LIST, this product will suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: bullnettle, smallflowered bittercress, Carolina geranium, smallflowered buttercup, common and rough cinquefoil, red clover*, horseweed or marestalk, mousetail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, and Virginia copperleaf.  * These weeds are only partially controlled.  Apply no more than 2 pints of Tenkoz Lo-Vol 4 Solventless Herbicide in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered.  If desired, Tenkoz Lo-Vol 4 Solventless Herbicide may be applied pre-plant to soybeans in tank mixtures with other herbicides such as Poast®, Poast Plus®, Roundup®, Roundup D-Pak®, Honcho®, Gramoxone Extra®, Prowl®, Pursuit Plus®, Scepter®, Scepter 70 DG, Squadron® and others that are registered for pre-plant soybean use.

**SOYBEANS (Preplant Only)\* (continued)**

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Postemergence		<b>NOTE:</b> Unacceptable injury to soybeans planted in fields previously treated with Tenkoz Lo-Vol 4 Solventless Herbicide may occur. Whether or not soybean injury occurs and the extent of the injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of Tenkoz Lo-Vol 4 Solventless Herbicide application and the emergence of the soybean plant.

**RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (PREPLANT)**

Do not apply this product when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.

Apply no more than 2 pints of this product per acre in one season prior to planting soybeans.

Do not apply this herbicide prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.

Do not replant fields treated with this herbicide in the same growing season with crops other than those labeled for 2,4-D preplant use.

Do not mow or cultivate weeds prior to treating with this product as poor control may result.

Do not cut for feed treated hay, forage, or fodder or graze treated soybeans to livestock.

Only one application of this product may be made prior to planting soybeans per growing season.

Do not cut for feed or graze treated cover crops to livestock.

**\*Not currently registered in California.**

**GRAIN SORGHUM (milo)**

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Annual broadleaf weeds	1/2 pint	Treat when sorghum is 5 to 15 inches tall (to top of canopy). If sorghum is taller than 8 inches to top of canopy, use drop nozzles to keep spray off crop foliage. <b>Do not treat during the boot, flowering or early dough stages.</b>
Perennial broadleaf weeds	3/4 to 1 pint	

**RESTRICTIONS AND LIMITATIONS FOR USE ON SORGHUM**

Do not forage or feed fodder for 7 days following application.

A minimum application volume of 5 gallons per acre by air or 10 gallons per acre by ground is recommended.

**GRASSES FOR SEED PRODUCTION**

CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 to 1-1/2 pints	Apply to established stands in spring from tiller to early boot stage. <b>Do not spray in boot stage.</b> New spring seedlings may be treated with the lower rate after grass seedlings have at least 5 leaves. Perennial weed regrowth may be treated in the fall. <b>DO NOT USE IN CALIFORNIA</b>
Perennial broadleaf weeds	2 to 3 pints	



**SUGARCANE**

CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Preemergence</b>	2 pints	Apply before canes appear for control of emerged broadleaves. Apply after cane emerges and through layby. DO NOT USE IN CALIFORNIA.
<b>Postemergence</b>	2 to 4 pints	

**WEEDS AND BRUSH IN PASTURES, RANGELANDS, AND FALLOWLAND**

CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Established grasses and rangeland</b> Annual broadleaf weeds Perennial and biennial broadleaf	2 pints 3 to 4 pints	Apply when weeds are small and actively growing and prior to bud stage. Do not apply to newly seeded areas until grass is well established. Do not apply when grass is in the boot to milk stage if grass seed production is desired. Bentgrass and legumes may be injured by this treatment.
<b>Sand sage, sagebrush, shinnery oak and other 2,4-D susceptible woody species</b>	4 pints	Apply aerially to brush in 2 or more gallons of water per acre. One gallon of fuel oil may be included in the mixture. Consult state or local brush control specialists for more effective rate, volume and timing of spray applications.
<b>FALLOWLAND AND CROP STUBBLE</b> Annual broadleaf weeds	1 to 2 pints	Use the lower rate when weeds are small (2 to 3 inches tall) and growing actively. Use the higher rate on older and drought-stressed plants.
Biennial broadleaf weeds	2 to 4 pints	Spray while musk thistles or other biennial species are in the seedling to rosette stage, and before flower stalks are initiated. The lower rate can be used in spring during rosette stage. In fall or after flower stalks have developed, use the highest rate.
Perennial broadleaf weeds	2 to 6 pints	Spray weeds in bud to bloom stage, or in good vegetative growth. Do not disturb treated area for at least 2 weeks after treatment, or until weed tops are dead.
Wild garlic and onion in crop stubble	4 to 6 pints	Apply to new regrowth of wild onion or garlic which occurs in the fall following harvest of cereal grains, soybeans, corn or grain sorghum.

**RESTRICTIONS AND LIMITATIONS FOR USE ON PASTURES, RANGELAND, AND FALLOWLAND:**

For ground application, a minimum of 10 to 15 gallons of water per acre is recommended for proper spray coverage.

For aerial application, use a minimum of 2 gallons of water per acre.

Do not graze lactating dairy animals on treated areas within 7 days after treatment.

Do not cut grass for hay within 30 days after application.

Withdraw meat animals being finished for slaughter from treated forage at least 3 days before slaughter.

## WEEDS IN ORNAMENTAL TURF AREAS

### Golf Courses, Cemeteries, Parks, and other Turf Areas

WEEDS IN CROP	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Annual broadleaf weeds</b>	2 pints	Apply any time weeds are growing vigorously. Cool-season weeds such as common chickweed, henbit and pepperweeds should be sprayed when they appear in fall or early spring. Warm-season weeds such as knotweed respond best when they are small. If there is additional germination, repeat treatment. Also controls cocklebur, galinsoga, lambsquarters, pigweed, ragweed and sunflower.
<b>Perennial and biennial broadleaf weeds</b>	3 to 4 pints	To control dandelion, plantain and most other common broadleaf weeds in turf, apply in spring or fall when these weeds are growing actively. Treat wild garlic or onion in three successive seasons (Example: spring, fall, spring). Do not apply to newly seeded areas until sod is formed and grass has been cut at least twice. Do not use this product for susceptible southern grasses such as St. Augustine. Bentgrass and clover may be injured by this treatment. Also controls bindweed, chicory, docks, ground ivy, hawkweed, thistles (Canada, musk, bull and Scotch), smartweed, tansy ragwort, wild onion and wild garlic.

#### RESTRICTIONS AND LIMITATIONS FOR USE IN TURF AREAS

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried or dust has settled.

The maximum number of broadcast applications per treatment site is 2 per year. This does not exclude spot treatment.

For ground application in turf areas, use enough water for good coverage (minimum 10 gallons per acre).

Do not graze animals on treated areas within 7 days after treatment.

If needed, irrigate ornamental turf thoroughly before application. Spray when air is calm to avoid drift. Avoid treatment when temperatures exceed 85°F or are expected to do so within 24 hours after application.

## WEEDS AND BRUSH IN NON-CROP AREAS

### Fencerows, Roadsides, Vacant Lots, Airfields, Railroad, Highway and Utility Rights-Of-Way, And Other Non-Crop Areas

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Annual broadleaf weeds</b>	2 to 4 pints	Apply when most weeds are still young and growing vigorously.
<b>Perennial and biennial broadleaf weeds</b>	3 to 6 pints	Apply when weeds are actively growing and near the bud stage, but before flowering. For best results on tansy ragwort and musk thistle, treat in rosette stage, before bolting. A second application is usually needed for best results on thistle, nettle and bindweed. Treat wild onion or garlic in early spring and in fall when they are young and growing actively.

*(continued)*

**WEEDS AND BRUSH IN NON-CROP AREAS (continued)**

Fencerows, Roadsides, Vacant Lots, Airfields, Railroad, Highway and Utility Rights-Of-Way, And Other Non-Crop Areas

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
Woody plants	6 to 8 pints	Apply in 30 to 100 gallons of spray per acre, preferably through low-volume equipment such as DIRECTA-SPRA™, WOBBLER™, MINI-WOBBLER™ or SPIROMETER™. Treat when 2,4-D susceptible species are in full leaf and growing actively. Repeated applications, oil or wetting agent, and/or high volume spraying (300 to 500 gallons of spray per acre) may be needed for acceptable control of some species or if brush growth is dense.

**RESTRICTIONS AND LIMITATIONS FOR USE IN NON-CROP AREAS**

For aerial application to solid stands of susceptible brush, use 2 to 4 quarts in 3 to 12 gallons volume per acre. Two to 4 quarts of fuel oil may be included in this mixture.

Applications will be less effective when conditions such as deficient soil moisture reduce brush growth.

**TANK MIXTURES FOR NON-CROP AREAS**

Tenkoz Lo-Vol 4 Solventless And GARLON® 4 Or GARLON 3A Tank Mixtures for Non-Crop Areas

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Broadleaf weed control</b>	2 to 4 pints TENKOZ LO-VOL4 Solventless plus 2 to 6 pint Garlon-4 or 3 to 8 pints Garlon-3A	For wider spectrum control of broadleaf weeds and woody plants:  Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing.
<b>Woody plant control</b> Broadcast foliar spray	1 to 2 gallons TENKOZ LO-VOL 4 Solventless plus 1-1/2 to 3 quarts Garlon-4 or 2 to 4 quarts Garlon-3A	Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when woody plants are actively growing.
<b>Woody plant control</b> High volume leaf-stem treatment with ground equipment	1 to 8 quarts TENKOZ LO-VOL 4 Solventless plus 1-1/2 to 12 pints Garlon-4 or 2 to 16 pints GARLON-3A	Mix 1 to 2 quarts Tenkoz Lo-Vol 4 Solventless Herbicide plus 1-1/2 to 3 pints Garlon-4 or 2 to 4 pints Garlon-3A in enough water to make 100 gallons of spray. Apply at a volume of 100 to 400 gallons of total spray per acre depending on size and density of woody plants. Thoroughly wet all leaves, stems and root collars of plants to be controlled.

(continued)

**TANK MIXTURES FOR NON-CROP AREAS (continued)****Tenkoz Lo-Vol 4 Solventless And GARLON® 4 Or GARLON 3A Tank Mixtures for Non-Crop Areas**

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Woody plant control</b> Aerial application (helicopter only)	1 to 2 gallons TENKOZ LO-VOL 4 Solventless plus 3 to 4 quarts Garlon-4 or 4 to 6 quarts Garlon-3A	Apply in a total spray volume of 10 to 30 gallons per acre using drift control equipment such as the MICRO-FOIL® boom or an effective drift control agent. Use the higher rates and volumes when plants are dense or under drought conditions.

**Tenkoz Lo-Vol 4 Solventless And BANVEL® Herbicide Tank Mixtures For Non-Crop Areas**

WEEDS	AMOUNT OF TENKOZ LO-VOL 4 SOLVENTLESS HERBICIDE PER ACRE	DIRECTIONS
<b>Annual broadleaf weeds</b>	2 to 4 pints TENKOZ LO-VOL 4 Solventless plus 1/2 to 1-1/2 pints Banvel	For wider spectrum control of broadleaf weeds and woody plants:  Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing. Use the higher rates when treating dense or tall vegetative growth.
<b>Perennial and biennial broadleaf weeds</b>	3 to 6 pints TENKOZ LO-VOL 4 Solventless plus 1/2 to 6 pints Banvel	Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing but prior to flowering. Use the lower rates for biennials less than 3 inches rosette diameter. Use the higher rates for perennial weeds or for biennial weeds past the 3-inch rosette stage.
<b>Woody plant control</b> Broadcast, high volume, stem foliage or aerial application	1 to 2 gallons TENKOZ LO-VOL 4 Solventless plus 2 to 8 quarts Banvel	Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves, stems and root collars (100 to 400 gallons per acre) or apply aerially in enough water to deliver total spray volume of 10 to 30 gallons per acre using drift control agent. Use the higher rates and volumes when plants are dense or under drought conditions.

**SMALL AREA APPLICATIONS FOR NON-CROP USE**

For control of broadleaf weeds in small non-crop areas with hand held or back-pack sprayers mix 4 fluid ounces Tenkoz Lo-Vol 4 Solventless Herbicide per gallon of water. Thoroughly wet all weed foliage. Maintain agitation of mixture to prevent separation.

**FOREST MANAGEMENT\*****CONIFER RELEASE**

To control alder, apply 1-1/2 to 2 quarts Tenkoz Lo-Vol 4 Solventless Herbicide in 9-1/2 to 15 gallons water per acre as a foliage spray. Treat when 3/4 of the brush foliage has attained full size leaves and before new conifer growth reaches 2" in length. This is usually between early May and mid-June. Adjust treatment date depending on stage of growth of conifers and brush species. This may cause leader deformation on exposed firs, but they should overcome this during the second year after spraying.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply 3 quarts Tenkoz Lo-Vol 4 Solventless Herbicide plus 3 quarts fuel oil in 8-1/2 to 15 gallons water per acre before new growth on Douglas fir is 2" long. To control manzanita and ceanothus in ponderosa pine, apply 3 quarts Tenkoz Lo-Vol 4 Solventless Herbicide before pine growth begins in spring.

To control hazel brush in the Lake states, apply 2 quarts Tenkoz Lo-Vol 4 Solventless Herbicide in 6 to 25 gallons of water per acre when new shoot growth of hazel is complete (usually mid-July).

In northern areas, if possible conifer injury can be tolerated, 1-1/2 to 3 quarts of Tenkoz Lo-Vol 4 Solventless Herbicide applied aerially in 8 to 25 gallons of water per acre after conifers such as jack pine, red pine, black spruce, and white spruce have hardened off (usually mid-July) will provide control of competing hardwoods including alder, aspen, birch, hazel, and willow.

#### **SITE PREPARATION**

**Budbreak Spray:** To control alder and other susceptible species before planting forest seedlings, apply 2 to 4 quarts Tenkoz Lo-Vol 4 Solventless Herbicide in 9 to 15 gallons fuel oil per acre after alder buds break, but before foliage is 1/4 full size.

**Foliage Spray:** To control alder before planting forest tree seedlings, apply 2 quarts Tenkoz Lo-Vol 4 Solventless Herbicide plus 2 quarts fuel oil in 9 to 15 gallons of water per acre after most alder leaves are full size.

Consult your regional or extension forester or state herbicide specialist for recommendations to fit local conditions.

**\*Not currently registered in California.**

### **LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants that this product conforms to the chemical description on the label; that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS, OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

### **NOTICE TO BUYER**

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

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GARLON® is a trademark of Dow AgroSciences

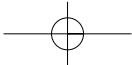
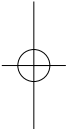
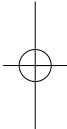
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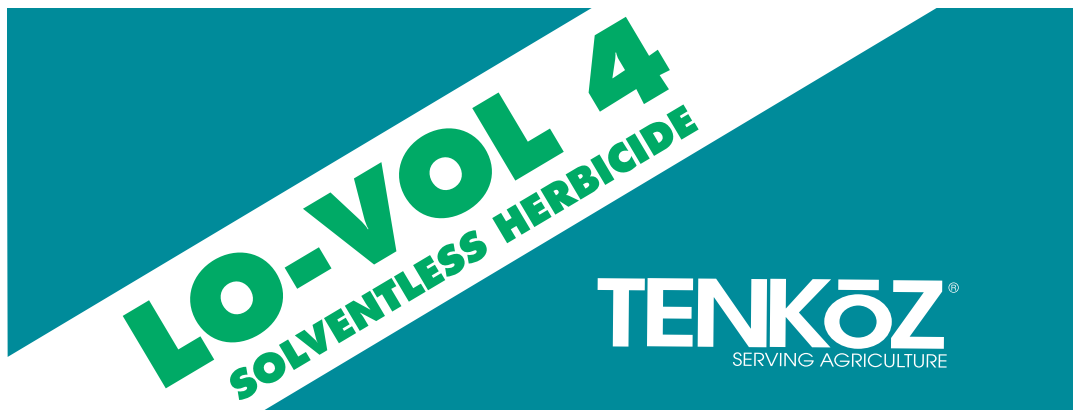
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**NOTES**





PULL HERE TO OPEN  
PRESS TO RESEAL

330141

**Solventless Ester Formulation For Agricultural Weed Control,  
Conifer Release, Site Preparation, Turf And Non-cropland Weed Control.**

**ACTIVE INGREDIENT:**

2,4-Dichlorophenoxyacetic acid, isooctyl (2-ethylhexyl) ester ..... 62.6%\*

**INERT INGREDIENTS:** ..... 37.4%

100.0%

\*2,4-Dichlorophenoxyacetic acid equivalent 41.5% or 3.8 pounds per gallon. Isomer specific by AOAC method No. 978.05

EPA Reg. No. 71368-14-55467

EPA Est. No. 228-IL-1

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Attached Booklet for Additional Precautionary Statements.

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

**FIRST AID**

<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
<b>NOTE TO PHYSICIANS</b>	
No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.	

Manufactured For:

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071368-14-55467. 20031023. Iv4sh