STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

To: Board of Pesticides Control
From: Julia Vacchiano, Pesticide Registrar & Water Quality Specialist
RE: SLN ME-220001, Goaltender, EPA Reg. # 92894-3 For Post-Emergent Use in Broccoli
Date: October 14, 2026

Mark Hutton, Ph.D., a specialist at the University of Maine Cooperative Extension, requests the extension of an existing SLN that allows for post-emergent application of Goaltender (EPA Registration #: 92894-3), first registered in 2009 and most recently extended in 2022. The UMaine letter of support states that GoalTender, active ingredient oxyfluorfen, is an important option for broccoli producers who need to apply herbicide to suppress certain broadleaf weeds after crop emergence, especially Hairy Nightshade and Pigweed. GoalTender is approved for both pre-transplant and pre-emergence applications, but post-emergence use fills a need in controlling difficult weed species that emerge later in the growing season. This extension would validate this Section 24(c) label until December 31, 2031.

Risks associated with GoalTender use on crops prevent the use from being added specifically to the EPA master label. The Section 24(c) label warns that use on broccoli may result in crop injury, crop yield reduction, and possible crop loss. Risks associated with use are outlined clearly on page 1 of the attached Special Local Need label. This product is also toxic to aquatic invertebrates and wildlife and can not be applied to water or areas where surface water is present.

As stated in Dr. Hutton's letter of support, Hairy Nightshade is of special significance because Maine growers plant broccoli in rotation with potatoes. Hairy Nightshade is an alternative host for late blight (*Phytophthora infestans).* Control of this weed may reduce the need for fungicide applications on potatoes during a later crop rotation.

In approving the original SLN application, the Board reviewed tolerance studies, product toxicity data, and environmental fate data, and determined that the extended use would not result in unreasonable adverse effects. The review Pamela J. Bryer, Ph.D., BPC Toxicologist, conducted supports this determination. Please refer to her memo included in this package as well as the report addendum by current BPC toxicologist Doug Van Hoewyk, Ph.D.

Please review the following included documents:

- Letter of request from Mark Hutton, Ph.D., University of Maine Cooperative Extension
- Letters of support from Pyxis Regulatory Consulting, Inc. representing Nutrichem USA, Inc.
- Toxicology Report – Pamela J. Bryer, Ph.D.

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- Risk Assessment Addendum – Doug Van Hoewyk, Ph.D.
- GoalTender Section 24(c) label for requested approval
- Goal Tender Section 3 label
- GoalTender Safety Data Sheet

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Putting Knowledge to Work with the People of Maine

09/30/2026

Dr. Dan Beran
Director of Technical Services
Crop Protection
Nufarm
10 Eastwood Drive
Eldora, IA 50624
daniel.beran@nufarm.com

Dear Dan,

I am writing this letter to request a Special Needs Registration for post-emergent application of the herbicide GoalTender. The Special Local Needs Registration for GoalTender herbicide with the active ingredient Oxfluorfen is an important option for broccoli producers who need to apply a post-emergent herbicide to suppress or control broadleaf weeds after crop emergence.

Several of the broccoli producers have used GoalTender (available under 24(c) Special Local Need Registration SLN ME-220001B) to great benefit and are reliant on this product when preplant herbicides have not worked effectively. This is important chemistry for post-emergence control of nightshade and pigweed. Control of hairy nightshade which serves as an important alternate host for the late blight *Phytophthora infestans* in potatoes. Broccoli may be grown in rotation with potatoes; therefore, control of hairy nightshade may reduce the need for fungicide use on potatoes.

I fully support the renewal of the Special Local Needs Registration for GoalTender herbicide for use in Maine.



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PYXIS

ELECTRONIC SUBMISSION

October 7, 2026

Julia Vacchiano
Pesticide Registrar and Water Quality Specialist
Maine Board of Pesticides Control
28 State House Station
Augusta, ME 04333-0028

RE: Special Local Need, FIFRA Section 24(c) Application
GoalTender (EPA Reg. No. 92894-3)

Dear Ms. Vacchiano,

Nutrichem USA, Inc. respectfully requests to renew the Special Local Need (FIFRA Section 24(c)) for Postemergence Use in Broccoli for GoalTender (EPA Reg. No. 92894-3). We request the SLN registration be issued under Nutrichem USA, Inc. In addition, Nutrichem USA, Inc. asks that the label also be issued under the sub-registrant, Nufarm Inc. (EPA Reg. No. 92894-3-71368).

Please note: While Nutrichem USA, Inc., is interested in adding this use to its EPA-approved Section 3 label, we will not be submitting a label amendment request at this time. Because oxyfluorfen is currently under EPA Registration Review, EPA is not entertaining amendments to add new uses. As a result, this proposed use addition cannot be pursued until the Registration Review process has been completed and EPA resumes consideration of such amendments.

In support of this SLN application, please find the following:

1. Letter of Request (this letter)
2. One (1) copy of EPA Form 8570-25
3. One (1) copy of each draft 24(c) label
4. Letter supporting Nufarm Inc.
5. Letter of Authorization

Please contact me at 253-853-7369 or maryanne@pyxisrc.com, if you have any questions or need additional information.

Sincerely,



Maryanne Kellogg
Agent for Nutrichem USA, Inc.

Enclosures

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GOVERNOR

AMANDA E. BEAL
COMMISSIONER

Memorandum

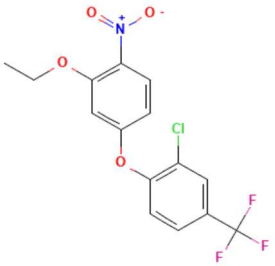
To: Board of Pesticides Control

From: Pamela J. Bryer, Ph.D. | Pesticides Toxicologist | Maine Board of Pesticides Control

Subject: Goal Tender FIFRA 24(c) Special Local Need registration

Date: February 18, 2022

Oxyfluorfen, the active ingredient in Goal Tender, is an herbicide that has been in use since the late 1970's. It works as a contact herbicide that inhibits a cellular enzyme leading to damage of the cell membrane. It is in Group 14 of the Herbicide Resistance Action Committee Mode of Action Classification (2021 Edition).[1] It is immobile in soil and, depending on circumstances, is considered to be moderately persistent to persistent. Laboratory studies indicate low toxicity to mammals, honeybees, some sediment-dwelling organisms, and some algae. Moderate toxicity is seen for birds, earthworms, fish, some sediment-dwelling organisms, some aquatic invertebrates, and some algae. High toxicity was seen for acute exposures to aquatic plants and aquatic invertebrates.



Exposed applicators have found the product is an irritant to eyes, skin, and occasionally respiratory tract tissues. Data from the California Pesticide Illness Surveillance Program provides an example of a human exposure incident; a group of agricultural workers entered a field 30 minutes following application (a violation of the 24-hour restricted entry interval (REI)) and nine out of 15 experienced symptoms of chemical conjunctivitis, eye irritation, tingling and itching of the skin, nausea, dizziness, headache, and vomiting.[2]

The WHO Recommended Classification of Pesticides by Hazard identifies oxyfluorfen as unlikely to present an acute hazard in normal use.[3]

Risks associated with oxyfluorfen:
Managing risk with pesticides is largely a function of controlling exposure. Current-use pesticides often degrade quickly and reach low or non-detectable concentrations by the time the treated commodity reaches the market. This document explores if there are currently ongoing exposures of oxyfluorfen and how use on broccoli might add to those exposures.

MEGAN PATTERSON, DIRECTOR
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maine DEPARTMENT OF Agriculture Conservation & Forestry

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Current occurrences in the marketplace:
USDA testing routinely includes oxyfluorfen as part of the Pesticide Data Program (PDP). Out of 141,238 samples tested 106 samples have tested positive for oxyfluorfen which is 0.1% of all tests.[4] The highest detection found to date is 0.011 ppm. The only violative tests occurred when the active ingredient was found on crops lacking established tolerances. Detections have been made on cilantro, celery, spinach, rice, raisins, green onions, and mustard greens, none of the detections exceeded the established tolerances. The current tolerance for broccoli is 0.05 ppm.[5] The PDP testing has included over 7,400 samples of broccoli and cauliflower, none of the samples contained detectable concentrations of oxyfluorfen.

Potential exposure from broccoli consumption:
The highest concentration representing use on broccoli was found to be 0.0168 ppm following use at the 0.25 lbs a.i./A rate.[6] These data were submitted as part of IR-4 tolerance setting. Experiments found no residues in broccoli samples treated with 0.125 lbs a.i./A but did find detectable residues in one out of seven fields at the 0.25 lbs a.i./A rate. The maximum detected broccoli residue in that one field is the 0.0168 ppm mentioned above.

The average daily consumption of broccoli is 7.5 lbs/yr which corresponds to 9.3 grams/day.[7] If an adult consumes this amount of broccoli that was treated with oxyfluorfen (and that broccoli ended up with the maximum detected residue of 0.0168 ppm) they would be expected to be exposed to 0.00000195 mg oxyfluorfen/ kg body weight per day. This is lower than the established acceptable daily intake (ADI) of 0.003 mg oxyfluorfen/ kg body weight per day.[8] This value is conservatively based on 100% of the broccoli weight even though it is understood that oxyfluorfen is only going to be present in fatty-type tissues of the plant (based on its K_{ow} of 4.86 and that broccoli is 0.4% fat).[9,10] Additionally, this is based on 100% uptake into the body even though rat studies have shown that only 18% is expected to cross the GI tract and into the body.[11]

Oxyfluorfen is classified as likely to be carcinogenic to humans with an exposure level for cancer risk set at 0.0732 mg oxyfluorfen/kg body weight per day.[12] Based on the above calculation an individual would have to eat over 37,000 daily equivalents to reach this exposure level for cancer risk. This value overestimates the exposure potential by using the highest known concentration of oxyfluorfen in broccoli or any other commodity tested in USDA's PDP program, overestimating the partitioning into the broccoli, and overestimating the potential for crossing out of the GI tract.

Fate and transfer in the environment:
As previously discussed oxyfluorfen has a high K_{ow} indicating it is likely to partition into fatty tissues. That together with the low solubility in water indicates leaching into groundwater is not a likely concern for this compound. The vapor pressure and Henry's law constant (0.026 mPa and 0.0238 Pa/ m^3 mol^{-1} respectively) indicate low and non-volatility, together with the K_{ow} and solubility values, indicate that movement off-site is unlikely.[13,14]

In studies looking at the depth of penetration into the soil horizon oxyfluorfen has been found to travel short distances.[15] One study found the compound stayed within the top ten centimeters at 28 days after application. Another study found after three to twelve centimeters of rain the product traveled to five to nine centimeters deep.

Degradation:
Soil half-life data are variable. The range for laboratory-derived half-life data averages from 35 to 138 days, though the full range went up to 438 days. Soil field-derived half-life data were also variable and ranged from 31 to 172 days, averaging at 73 days.[16] Using the five half-lives rule of thumb, under the most extreme persistence (438 days) this chemical would take approximately six years until the product would be eliminated

from the environment, or more specifically 97.5% degraded. Under more normal or average conditions, the product would be expected to be eliminated from the soil environment in one year, again at the 97.5% eliminated threshold.

Sunlight appears to have significant degradation effects on the chemical which are reflected in shorter half-lives when the compound is in or on the plant or in sun-lit water. Water itself does not cause the compound to break down. On the surface of a plant, the breakdown half-life is 1.6 days. When the product is measured as on and in the plant tissues the half-life is 3.6 days.[16]

Long term soil dynamics:
Due to the combination of persistence in the soil and bioaccumulation potential the long-term patterns of oxyfluorfen are of concern. Soils of differing compositions will differ in their behavior, however, some studies indicate that oxyfluorfen does not accumulate in soils significantly. Figure 1 shows the soil concentration of oxyfluorfen on the same parcel over a four-year period.[17] Given the typical half-life 95.5% elimination from the soil is expected at the one-year point and you can see from the graph that the prediction is pretty accurate. The soil concentration at day 150 is approximately 0.8 mg/kg and the soil concentration at day 1350 (or 150 days after the fourth application) is approximately 1 mg/kg. While this is clearly an increase it does not follow the typical patterns of additive exposures which increase over time. Additionally, the soil maximum concentrations do not increase over time.

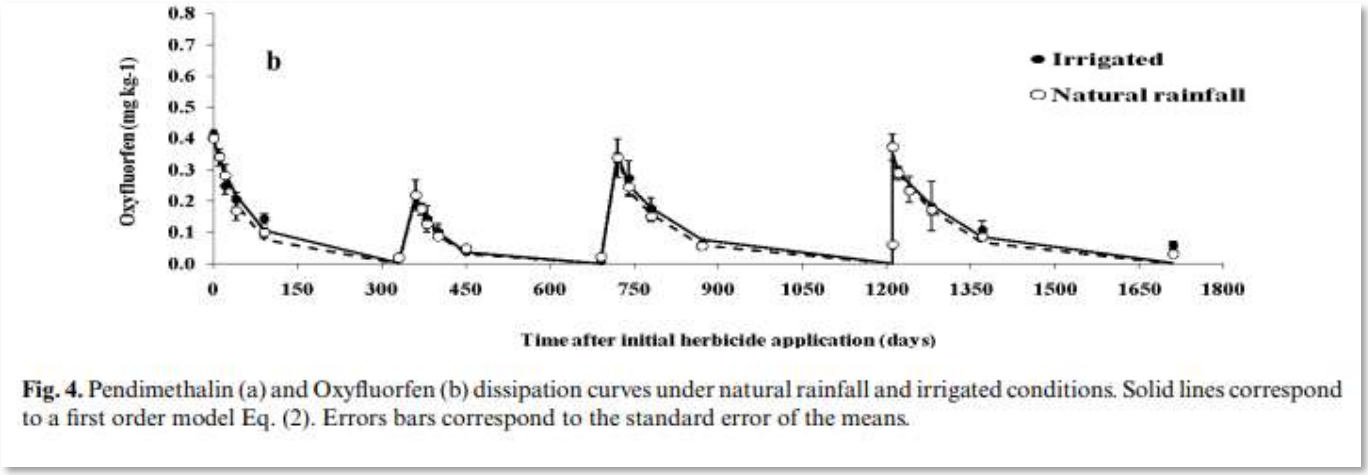


Fig. 4. Pendimethalin (a) and Oxyfluorfen (b) dissipation curves under natural rainfall and irrigated conditions. Solid lines correspond to a first order model Eq. (2). Errors bars correspond to the standard error of the means.

Figure 1. Excerpt from the paper by Claudio et al. 2009 showing soil concentrations of oxyfluorfen following repeated applications over a four-year period.

Another study has shown that oxyfluorfen residues that become entrapped by the soil stay bound to the soil particles.[18] Forty-two percent of the applied oxyfluorfen was found in the top two centimeters of soil 109 days following a wintertime application in a Mediterranean olive orchard under natural rainfall conditions. Of the oxyfluorfen found offsite it was found in the sediment, not the rainwater accumulated offsite. This reaffirms the data suggesting oxyfluorfen is unlikely to leach while reminding us that offsite transport can still occur. The residues are not considered to be active when they are bound.

Technical consideration:
It is of note that oxyfluorfen may be considered as a PFAS compound under the State of Maine's PFAS definition as per 38 MRS §1614(1)(f). Oyxfluorfen does not meet the Office of Pesticide Pollution's working definition of PFAS, nor does it fit into the Buck et al. 2011 classification scheme.[19,20]

Details of this SLN application:
The Goal Tender supplemental label states that the required amount of time following application that harvest activities are allowed is 35 days. There are 10 specific restrictions on the supplemental label. Use under this label does not allow rates that exceed those tested in the IR-4 testing program (0.25 lbs per acre), meaning the estimates of how much oxyfluorfen may enter the food supply would likely not exceed those estimated by the analysis performed. Similar SLN registrations have been issued in AZ, DE, MI, NY, PA, & TX.

The EPA Office of Pesticide Program's webpage indicates that the oxyfluorfen registration reevaluation interim decision is to be released in the first quarter of 2022.[21]

References

[1]Resistance classification group: https://hracglobal.com/tools/hrac-mode-of-action-classification-2021-map

[2]Applicator hazards: https://pubchem.ncbi.nlm.nih.gov/compound/39327#section=Skin-Eye-and-Respiratory-Irritations & https://pubchem.ncbi.nlm.nih.gov/compound/39327#section=Human-Toxicity-Excerpts

[3]Hazard classification: WHO (2005) The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification 2004, International Programme on Chemical Safety, p.34

[4]USDA PDP: https://www.ams.usda.gov/datasets/pdp

[5]Tolerance for broccoli: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-E/part-180/subpart-C/section-180.381

[6]Broccoli test residues: Submitted test results in 2009 SLN review, data generated by IR-4 National Pesticide Clearance Protocol oxyfluorfen/broccoli. PR No 08806. Analytical results Report Date 08/02/05.

[7]Broccoli consumption: https://www.statista.com/statistics/257338/per-capita-consumption-of-fresh-broccoli-in-the-us/

[8]ADI for oxyfluorfen: https://comptox.epa.gov/dashboard/chemical/executive-summary/DTXSID7024241

[9]Oxyfluorfen K_{ow} value: https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/502.htm

[10]Broccoli fat content: https://www.healthline.com/nutrition/foods/broccoli#nutrients

[11]Uptake rate: EPA 2014. Oxyfluorfen: Human Health Assessment Scoping Document in Support of Registration Review. PC Code 111601. Decision No. 489866. Nieves et al.

[12]Cancer risk: EPA 2014. Oxyfluorfen: Human Health Assessment Scoping Document in Support of Registration Review. PC Code 111601. Decision No. 489866. Nieves et al.

[13]Water solubility: https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/502.htm

[14]Vapor pressure: https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/502.htm

[15]Oxyfluorfen soil mobility: https://pubchem.ncbi.nlm.nih.gov/compound/39327#section=Environmental-Fate-Exposure-Summary

[16]Half-live values: https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/502.htm

[17]Figure of oxyfluorfen applications over four years: Claudio A. Alister , Patricio A. Gomez , Sandra Rojas & Marcelo Kogan (2009) Pendimethalin and oxyfluorfen degradation under two irrigation conditions over four years application, Journal of Environmental Science and Health Part B, 44:4, 337-343, DOI: 10.1080/03601230902800986

[18]Oxyfluorfen in olive orchard: Calderon MJ, De Luna E, Gomez JA, Hermosin MC. Herbicide monitoring in soil, runoff waters and sediments in an olive orchard. Sci Total Environ. 2016 Nov 1;569-570:416-422. doi: 10.1016/j.scitotenv.2016.06.126. Epub 2016 Jun 25. PMID: 27351146.

[19] EPA PFAS definition: https://www.epa.gov/pesticides/pfas-packaging

[20]Buck, R.C., Franklin, J., Berger, U., Conder, J.M., Cousins, I.T., de Voogt, P., Jensen, A.A., Kannan, K., Mabury, S.A. and van Leeuwen, S.P. (2011), Perfluoroalkyl and polyfluoroalkyl substances in the environment: Terminology, classification, and origins. Integr Environ Assess Manag, 7: 513-541. https://doi.org/10.1002/ieam.258

[21]OPP renewal schedule: https://www.epa.gov/pesticide-reevaluation/upcoming-registration-review-actions

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

November 5th, 2026

Re: Addendum to the 2022 Risk Assessment for GoalTender® Herbicide, EPA Reg. No. 92894-3

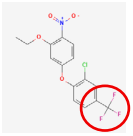
To: Maine Board of Pesticide Control

Dear Members of the Maine Board of Pesticide Control:

I have reviewed the toxicological profile of the product GoalTender® Herbicide. This product contains the active ingredient oxyfluorfen. The use of oxyfluorfen was evaluated in a 2022 risk assessment by BPC toxicologist Dr. Bryer. This was motivated by a Special Local Need (SLN) to request approval for Goaltender® on broccoli. My assessment on the risks of oxyfluorfen align with the 2022 document. In 2023, the EPA reviewed the registration of oxyfluorfen; this review altered uses of oxyfluorfen, but did not change its toxicological profile as new data were not submitted. This addendum provides new updates on the environmental fate of oxyfluorfen.

Summary Statement: The product GoalTender ® contains the active ingredient oxyfluorfen, which presents very low health risk to the general population- including children- and the environment if used according to the label. This conclusion aligns with the 2022 BPC risk assessment on oxyfluorfen. Oxyfluorfen is a PFAS that degrades into at least ten smaller PFAS metabolites, including trifluoroacetate (TFA). This degradant can contaminate water, but typically at concentrations that do not present a health or environmental risk to most organisms. However, degradation studies also reveal that oxyfluorfen can defluorinate, which prevents the formation of TFA.

The active ingredient oxyfluorfen is a PFAS as defined by the State of Maine and the OECD. EPA environmental fate studies reveal that it degrades into nine metabolites that retain the CF_3 moiety (circled in red to the right). These degradants are known to be precursors of the contaminant trifluoroacetate (TFA). Although TFA was not detected by the EPA, other studies noted that the degradation of oxyfluorfen in aerobic soil yields 5% TFA (Johnsen et al., 2026); it was also detected as a food residue (ESFA, 2014). Thus, the use of oxyfluorfen will increase the risk of TFA accumulation in the environment, but there is great uncertainty if current exposure to TFA in Maine presents a high risk.



Intriguingly, oxyfluorfen is also one of several PFAS active ingredients that can defluorinate under natural conditions. In an EPA study assessing the risk of oxyfluorfen in drinking water, an aqueous photolysis experiment degraded oxyfluorfen into three deflourinated metabolites (EPA, 2019). These data challenge the assumptions that oxyfluorfen is a "forever chemical" and a 100% conversation into TFA. It is not known if oxyfluorfen can also defluorinate in soil.

Please let me know if you have any questions on the environmental fate or risk of oxyfluorfen.

Respectfully,
Doug Van Hoewyk, PhD

Toxicologist; Maine Board of Pesticide Control

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DEPARTMENT OF Agriculture Conservation & Forestry

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References

EPA. (2019a). Oxyfluorfen: Tier II Drinking Water Exposure Assessment to Support Registration Review. EPA-HQ-OPP-2014-0778-0024

EPA. 2023. Oxyfluorfen. Amended Proposed Interim Registration Review Decision Case Number 2490 EPA-HQ-OPP-2014-0078

EFSA. (2014). Reasoned opinion on the setting of MRLs for saflufenacil in various crops, considering the risk related to the metabolite trifluoroacetic acid (TFA). *EFSA Journal*, *12*(2), 3585.

Johnsen, A. R., Henriksen, T., & Albers, C. N. (2026). *Formation of trifluoroacetic acid from common trifluoromethyl pesticides in agricultural soils* (Vol. 55, No. 2, p. e70160).

FIFRA 24(c) Special Local Need Label

GoalTender®

EPA Reg. No. 92894-3

24(c) Special Local Need Registration SLN ME-220001

For Postemergence Use in Broccoli

(For Distribution and Use Only in the State of Maine)

Expiration date: This label expires and must not be distributed or used in accordance with this SLN registration after December 31, 2031.

Conditions and Risks of Use for Special Local Need

USE OF GoalTender® (THE "PRODUCT") ON BROCCOLI (THE "CROP") FOR THIS SPECIAL LOCAL NEED MAY RESULT IN CROP INJURY, CROP YIELD REDUCTION AND/OR CROP LOSS AS FURTHER DISCUSSED BELOW. READ AND UNDERSTAND THESE CONDITIONS AND RISKS OF USE FOR SPECIAL LOCAL NEED BEFORE USING THE PRODUCT ON THE CROP.

This Product is available for use in the manner described in this Supplemental Labeling on the basis that, in the sole opinion of the user, the benefits and utility derived from the use of the Product on the Crop outweigh the potential risk of Crop injury, Crop yield reduction or Crop loss. The decision to use this Product in the manner described in this Supplemental Labeling must be made by each individual user on the basis of anticipated benefits versus (i) the potential risk of Crop injury, Crop yield reduction and Crop loss, (ii) the severity of the target pest infestation, (iii) the cost and availability of alternative pest controls and (iv) any other relevant factors.

By purchasing the Product for use, or using the Product, in the manner described in this Supplemental Labeling, you acknowledge and accept that, to the extent permitted by law:

(1) you assume all risk of Crop injury, Crop yield reduction and Crop loss;
(2) Nutrichem USA, Inc. does not make, and do not authorize any agent or representative to make, any representations or recommendations regarding the use of this Product on the Crop other than the statements on this Supplemental labeling;
(3) Nutrichem USA, Inc. does not make, and does not authorize any agent or representative to make, any warranties, express or implied, with respect to the use of the Product on the Crop and disclaim all warranties, expressed or implied, including any implied warranty of merchantability;
(4) Nutrichem USA, Inc. disclaims all liability for any damages, losses, expenses, claims or causes of actions arising out of or relating to Crop injury, Crop yield reduction and/or Crop loss;
(5) these Conditions and Risks of Use for Special Local Need supersede any contrary representations or recommendations by Nutrichem USA, Inc. or its respective agents or representatives, and any provisions in or on any Product literature or labeling including any provisions on the label affixed to the Product container.

If these Conditions and Risks of Use for Special Local Need are not acceptable, the unopened Product may be returned to the seller for a refund or used for a different labeled use in accordance with the label affixed to the Product container.

These Conditions and Risks of Use for Special Local Need are required by Nutrichem USA, Inc. and not specified by the US EPA or the State of Maine.

ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This label must be in the possession of the user at the time of pesticide application.
- Read this SLN labeling and the label affixed to the container for GoalTender™ before applying. All applicable use directions, precautions and restrictions on this SLN labeling and the label affixed to the product container must be followed.

Directions for Use

GoalTender® may be applied as a broadcast or directed spray for the postemergence suppression/control of susceptible broadleaf weed species in direct-seeded or transplanted broccoli.

Crop Tolerance Information: Broccoli are tolerant to postemergence applications of GoalTender; however, under certain conditions, GoalTender can cause severe crop injury. Application to crops grown under very mild (cool, cloudy) conditions can produce leaf cupping, crinkling, stunting, or necrotic lesions. When injury occurs, it is usually limited to the treated leaves with new leaves emerging undamaged. Delay in crop development and/or maturity, and yield reduction can result under these conditions.

Do not use GoalTender on plants that are weakened or are under stress due to temperature, disease, fertilizer, soil, salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

Application Rate, Timing and Method of Application: Apply GoalTender as a broadcast postemergence application at the rate of 4 to 6 fl oz per acre (0.125 to 0.188 lb active). GoalTender may also be applied as a directed application at a rate of 4 to 8 fl oz per acre (0.125 to 0.25 lb active). Directed applications are those where spray mixtures are applied in such a way as to minimize contact to crop leaves, directing the spray toward the soil at the base of the crop.

For direct-seeded crops apply when the crop reaches a minimum of four true leaves. For transplanted crops apply after a minimum of two weeks after planting.

For postemergence use in broccoli do not mix GoalTender with adjuvants (oils, surfactants), liquid fertilizer or pesticides.

Apply only with ground equipment in a spray volume of 20 gallons or more of water per acre. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer equipped with flat fan nozzles operated at the manufacturer's recommended pressure.

Weeds Controlled or Suppressed Postemergence: GoalTender provides postemergence control/suppression of the following weeds when used at recommended dosages:

Common Name	Scientific Name
burning nettle	*Urtica urens*
cheeseweed (Malva)	*Malva parviflora*
nightshade, black	*Solanum nigrum*
pigweed, redroot	*Amaranthus retroflexus*
purslane, common	*Portulaca oleracea*
shepherdspurse	*Capsella bursa-pastoris*
sowthistle, annual	*Sonchus oleraceus*

Cultural Considerations: Best weed control results when GoalTender is applied to young (1-4 leaf), actively growing weeds.

Use Restrictions

In addition to the General Use Restrictions in the product label for GoalTender, the following use restrictions must be observed:

- For direct-seeded crops, do not apply more than 8 fl oz per acre (0.25 lb active) per crop as a post emergence treatment.

- For transplanted crops, do not apply more than 8 fl oz per acre (0.25 lb active) per crop as a post-transplant treatment. If a pre-transplant (preplant) treatment has previously been made, the combination of pre- plus post-transplant treatments must not exceed 16 fl oz per acre per season (0.5 lbs active).
- Do not add any adjuvant or liquid fertilizer to the spray mixture.
- For postemergence use in broccoli do not mix GoalTender with adjuvants (oils, surfactants), liquid fertilizer or pesticides.
- Do not apply within 35 days of harvest.
- Do not apply when weather conditions favor drift. Avoid drift to all non-target areas. GoalTender is phytotoxic to susceptible plant foliage.
- **Chemigation**: Under this SLN label, do not apply this product through any type of irrigation system.
- Avoid application if heavy rainfall is predicted to occur within 24 hours after planned application.
- The use directions under this SLN label supersede the Section 3 label prohibitions for broccoli.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

Section 24 (c) Registrant :
Nutrichem USA, Inc.
No. 27 Life Science Park Road
Changping District
Beijing 102206, China

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(20261007)

GoalTender®
HERBICIDE

Use Directions For: artichokes (globe), broccoli/cabbage/cauliflower, cacao, citrus (nonbearing), coffee, conifer (seedbeds, transplants, container stock) and selected deciduous trees, corn, cotton, cottonwood, eucalyptus, fallow bed, (cotton/soybeans) fallow land, garbanzo beans, garlic, guava (Hawaii only), horseradish, jojoba, mint, onions, onions grown for seed, papaya (Hawaii only), soybeans, taro, treefruit/nut/vine

Active Ingredient	
oxyfluorfen: 2-chloro-1-(3-ethoxy-4-nitrophenoxy)4-(trifluoromethyl)benzene	41%
Other Ingredients	59%
Total	100%

Contains 4 pounds active ingredient per gallon

Shake Well Before Using

Keep Out of Reach of Children

CAUTION

Agricultural Use Requirements

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

Refer to inside of label booklet for Precautionary Statements and Directions for Use.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

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

EPA Reg. No. 92894-3 EPA Est. 81092-CHN-1

®Trademark of Nutrichem Co. Ltd.

Produced for
Adaura, LLC
4780 Ashford Dunwoody Road, Ste 540-267
Atlanta, GA 30338

NET CONTENTS
1 Gal.
(3.78 L)

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Avoid contact with skin or clothing.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

Mixers, loaders and applicators using engineering controls (see Engineering Controls requirements below) must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate) when mixing and loading
- Chemical-resistant apron when mixing and loading

All other mixers, loaders, applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate)
- Protective eyewear (goggles of face shield)
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when exposed to the product concentrate

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls: Mixers and loaders supporting aerial applications to fallow land or ground applications to corn, cotton, or soybeans must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must:

- Wear the personal protective equipment required above for mixers/loaders using engineering controls
- Wear protective eyewear if the system operates under pressure, and
- Be provided and have immediately available for use in case of emergency, such as a broken package, spill, or equipment breakdown, coveralls and chemical-resistant footwear.

Handlers performing applications to corn must use an enclosed cab that meets the definition in the Worker Protection Standard for agricultural pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators must:

- Wear the personal protective equipment required above for applicators using engineering controls
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical-resistant gloves, chemical-resistant footwear, and chemical-resistant headgear, if overhead exposure.
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6);

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove contaminated clothing/PPE 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 and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. See Directions for Use for additional restrictions. Do not contaminate water when disposing of equipment wash water or rinseate.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read all Directions for Use carefully before applying.

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

Agricultural Use Requirements:

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and 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 worker entry into treated areas during the restricted entry interval (REI) of 24 hours, except for the following:

- Onions, garlic and horseradish: The REI is 48 hours

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

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 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 enter or allow others to enter until sprays have dried.

Storage and Disposal:

Do not contaminated water, food or feed by storage or disposal
Pesticide Storage: Keep from Freezing. Store above 32°F
Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. 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.

Nonrefillable containers 5 gallons or less:
Container Handling: Nonrefillable container. Do not reuse or refill this container. After rinsing, offer for recycling if available available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

PRODUCT INFORMATION

GoalTender® herbicide is a selective herbicide for postemergence and preemergence residual weed control in labeled crops. Directions provided in the General Use Information section of this label apply to all uses of this product. Use directions for listed crops are provided in the Crop-Specific Use Directions section of this label.

Use Restrictions

The following use restrictions apply to all labeled uses of GoalTender (Refer to directions for use for individual crops for additional crop-specific use restrictions.):

- Do not graze or harvest plants from areas treated with GoalTender for feed or forage.
- Apply GoalTender only with ground equipment unless otherwise specified in crop-specific use directions.
- GoalTender is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops. Do not apply when weather conditions favor drift to non-target areas.
- Some labeled crops are tolerant to over-the-top applications of GoalTender if applied during dormancy. Do not make over-the-top applications unless specifically allowed in crop-specific use directions.
- Do not treat ditch banks or waterways with GoalTender or contaminate water used for irrigation or domestic purposes.
- Do not apply GoalTender in enclosed greenhouses as foliage injury will result.

Spray Drift Buffer Restrictions

- A 25 foot vegetative buffer strip must be maintained between all areas treated with this product and lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.
- Do not allow spray to drift from the application site and contact people, structures people may occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.
- For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy when wind speed is 10 mph or less at the application site as measured by an anemometer.
- Use coarse spray according to ASAE 572 definition for standard nozzles or VMD of 475 microns for spinning atomizer nozzles.
- The applicator also must use all other measures necessary to control drift.

Rotation Crop Restrictions

- Do not rotate to small-grain crops (includes barley, buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice) within 10 months following an application of GoalTender.
- Do not direct seed any crop, other than a crop labeled for use with GoalTender, within 60 days following application.
- Do not transplant seedlings of crops, other than crops labeled for use with GoalTender, within 30 days following application.
- **IMPORTANT: Unless otherwise specified elsewhere in this label or Adaura, LLC supplemental label or product bulletin, treated soil must be thoroughly mixed to a depth of 4 inches after harvest (or abandoning) of the treated crop but prior to planting of the rotational crop. Failure to achieve thorough and complete mixing or to follow the required minimum plant-back interval may result in crop injury, stand reduction and/or vigor reduction of the plant-back crop.** See specific fallow bed labeling instructions for required treatment-to-planting intervals following application of GoalTender to fallow beds or fallow fields.

Weeds Controlled

Common Name	***Scientific Name***
ageratum	*Ageratum conyzoides*
amaranth, spiny	*Amaranthus spinosus*
balsamapple	*Momordica charantia*
barnyardgrass (watergrass) †	*Echinochloa crus-galli*
bedstraw, catchweed	*Galium aparine*
bittercress, lesser	*Cardamine oligosperma*
bluegrass, annual †	*Poa annua*
buckwheat, wild	*Polygonum convolvulus*
burclover	*Medicago hispida*
buttercup, smallflower	*Ranunculus abortivus*
buttonweed	*Borreria laevis*
camphorweed	*Heterotheca subaxillaris*
canarygrass (annual)	*Phalaris canariensis*
carpetweed	*Mollugo verticillata*
cheeseweed (malva)	*Malva parviflora*
clover, red †	*Trifolium pratense*
clover, white †	*Trifolium repens*
cocklebur, common	*Xanthium pensylvanicum*
crabgrass, large (hairy) †	*Digitaria sanguinalis*
crotalaria	*Crotalaria species*
croton, tropic	*Croton glandulosus*
cudweed, narrowleaf	*Gnaphalium falcatum*

eveningprimrose, cutleaf	*Oenothera laciniata*
fiddleneck, coast †	*Amsinckia intermedia*
filaree, broadleaf	*Erodium botrys*
filaree, redstem	*Erodium cicutarium*
filaree, whitestem	*Erodium moschatum*
fireweed (from seed)	*Epilobium angustifolium*
flixweed	*Descurainia sophia*
foxtail, giant †	*Setaria faberi*
foxtail, green	*Setaria viridis*
foxtail, yellow	*Setaria lutescens*
geranium, Carolina	*Geranium carolinianum*
goosegrass †	*Eleusine indica*
groundcherry, cutleaf	*Physalis angulata*
groundcherry, Wright	*Physalis wrightii*
groundsel, common	*Senecio vulgaris*
henbit	*Lamium amplexicaule*
horseweed (marestail)	*Conyza canadensis*
jimsonweed	*Datura stramonium*
johnsongrass, seedling	*Sorghum halepense*
knotweed, prostrate	*Polygonum aviculare*
ladysthumb (smartweed)	*Polygonum persicaria*
lambsquarters, common	*Chenopodium album*
lettuce, prickly (china lettuce)	*Lactuca serriola*
mallow, little (malva)	*Malva parviflora*
mayweed (dog fennel)	*Anthemis cotula*
minerslettuce	*Montia perfoliata*
morningglory species, annual	*Ipomoea species*
morningglory, ivyleaf †	*Ipomoea hederacea*
morningglory, tall †	*Ipomoea purpurea*
mustard, black	*Brassica nigra*
mustard, blue (purple mustard)	*Chorispora tenella*
mustard, common yellow	*Brassica campestris*
mustard, hedge	*Sisymbrium officinale*
mustard, tumble (Jim hill mustard)	*Sisymbrium altissimum*
mustard, wild	*Brassica kaber*
nettle, burning	*Urtica urens*
nightshade, American black	*Solanum americanum*
nightshade, black	*Solanum nigrum*
nightshade, hairy	*Solanum sarrachoides*
oats, wild	*Avena fatua*
orach, red	*Atriplex rosea*
oxalis (bermuda buttercup)	*Oxalis pes-caprae*
panicum, fall	*Panicum dichotomiflorum*
pepperweed, Virginia	*Lepidium virginicum*
pepperweed, yellowflower	*Lepidium perfoliatum*
pigweed, prostrate	*Amaranthus blitoides*
pigweed, redroot	*Amaranthus retroflexus*
pimpernel, scarlet	*Anagallis arvensis*
poinsettia, wild	*Euphorbia heterophylla*
puncturevine	*Tribulus terrestris*
purslane, common	*Portulaca oleracea*
pusley, florida	*Richardia scabra*
ragweed, common	*Ambrosia artemisiifolia*
redmaids	*Calandrinia caulescens*
rocket, London	*Sisymbrium irio*

ryegrass, Italian	*Lolium multiflorum*
sage, lanceleaf	*Salvia reflexa*
sandbur, field	*Cenchrus incertus*
sandspurry, red	*Spergularia rubra*
sesbania, hemp	*Sesbania exaltata*
shepherdspurse †	*Capsella bursa-pastoris*
sicklepod	*Cassia obtusifolia*
sida, prickly (teaweed)	*Sida spinosa*
signalgrass, broadleaf	*Brachiaria platyphylla*
smartweed, pennsylvania	*Polygonum pensylvanicum*
sorrel, red (from seed)	*Rumex acetosella*
sowthistle, annual	*Sonchus oleraceus*
speedwell, birdseye	*Veronica persica*
spurge, garden	*Euphorbia hirta*
spurge, prostrate ††	*Euphorbia supina*
spurge, spotted ††	*Euphorbia maculata*
spurry, corn	*Spergula arvensis*
tansymustard	*Descurainia pinnata*
thistle, bull ††	*Cirsium vulgare*
thistle, Russian	*Salsola kali*
velvetleaf	*Abutilon theophrasti*
witchgrass	*Panicum capillare*
witchweed	*Striga asiatica*
woodsorrel, common yellow ††	*Oxalis stricta*

† Highest rate and/or multiple applications may be required for acceptable control.
†† Preemergence control only

Application Methods and Cultural Practices

Preemergence Weed Control

Apply the specified rate in a broadcast spray volume of 15 or more gallons of water per acre using calibrated spray equipment capable of uniform application to the soil surface. Seedling weeds are controlled as they come in contact with the soil-applied herbicide during emergence. Preemergence weed control is most effective when GoalTender is applied to soil surfaces that are clean (free of crop or weed residues or clippings) and weed-free. Prior to application, weed or crop residues should be removed by thorough incorporation into the soil using tillage equipment or by blowing the area to be treated. At least 0.25 inch of irrigation or rainfall is required to activate GoalTender and should occur within 3 or 4 weeks after application. For optimum results, GoalTender should be applied to prepared beds or soil surfaces that will be left undisturbed during the time period for which weed control is desired. Cultural practices that disturb or redistribute surface soil following treatment with GoalTender such as cutting water furrows will reduce weed control effectiveness.

Application Rates and Rate Ranges: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter and lighter weed infestations. Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, heavy weed infestations, or for extended residual preemergence weed control.

Postemergence Weed Control

Apply the specified rate in a broadcast spray volume of 20 or more gallons of water per acre (a minimum 10 gallons if applying GoalTender in tank mix with glyphosate). Because GoalTender is a contact herbicide, complete and uniform coverage of weed foliage is essential for optimum postemergence control. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases or in the presence of heavy trash (weed or crop residue). Postemergence applications of GoalTender are most effective when made to weeds at the seedling stage. Applications made later than

the 4-inch or 4 leaf stage may result in partial control or suppression. Postemergence applications should be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% v/v (2 pints per 100 gallons of spray) of an 80% active nonionic surfactant, labeled for application to growing crops, will enhance herbicidal effectiveness in controlling emerged weeds.

Postemergence Application Rates: Where a rate range is given, use a higher rate in the rate range for heavy weed infestations, weeds in advanced stages of growth or for extended residual preemergence weed control following control of existing emerged weeds.

Ground Application

Ground Broadcast: Apply GoalTender using conventional low-pressure ground spray equipment with flat fan spray nozzles. Follow manufacturer's recommendation for spraying pressure and boom height. An off-center (OC) nozzle positioned at the end of the boom may be desired. Check calibration of spray equipment before each use.

Directed Sprays: Apply GoalTender as a coarse low-pressure spray in a spray volume of 20 or more gallons of spray per acre (broadcast basis). Follow manufacturer's recommendations for nozzle spacing and operating pressure. Spray should be directed toward the soil at the base of the crop. In row crops, use a minimum of 2 flat fan nozzles per row (one on each side) and for optimum spray coverage use 4 flat fan nozzles per row (two on each side). The 2 forward nozzles should point forward and downward while the rear nozzles should point to the rear and downward. With either sprayer system, nozzles should be adjusted to cover the weed foliage but minimize contact with the crop. Do not apply with hollow cone nozzles.

IMPORTANT: GoalTender is a contact herbicide. Contact of sprays or drift with foliage or green stems can cause severe crop injury. Use directed sprays and spray shields and/or leaf lifters as necessary to minimize contact of spray or drift with crop foliage or stems. Young green stems of woody plants are also susceptible to injury from spray contact. Potential for injury to woody stems diminishes with loss of green color and the development of relatively impervious non-living corky tissue (bark) on the surface of the stem.

Band Application: Application rates listed in this label are for broadcast application. For band application, the rate per broadcast acre should be reduced according to the following formula:

Band Width (in inches) Row Width (in inches)	X	Rate per Broadcast Acre	=	Amount Needed per Acre for Banded Application

Spot Application

For spot application, apply sprays uniformly to soil for preemergence weed control or on a spray-to-wet basis for postemergence weed control. Mix the required amount of GoalTender with the recommended specified amount of water. For preemergence weed control, use one-half to one gallon of spray per 1000 sq ft. For postemergence weed control use a minimum of 1 gallon of spray per 1000 sq ft and add an 80% nonionic surfactant at the rate of 0.5 fl oz (1 Tbs) per gallon of spray. If making spot applications within an established crop, use coarse low-pressure sprays and direct the spray to the soil beneath the plants. To avoid crop injury, do not allow spray to contact leaves and stems of herbaceous plants or leaves or green stems of woody plants.

Amount of GoalTender Required to Treat 1000 sq ft at Specified Application Rate					
0.25 pt/acre	**0.5 pt/acre**	**1.0 pt/acre**	**1.5 pt/acre**	**2.0 pt/acre**	**4.0 pt/acre**
0.1 fl oz (2.75 ml)	0.2 fl oz (5.5 ml)	0.4 fl oz (11 ml)	0.55 fl oz (16.5 ml)	0.75 fl oz (22 ml)	1.5 fl oz (44 ml)

1 pint = 16 fl oz; 1 fl oz = 29.6 (30) ml

Aerial Application

Use aerial boom equipment designed for use with herbicides and a minimum spray volume of 10 gallons per acre (5 gallons per acre if tank mixed with glyphosate). **Do not aerially apply GoalTender unless crop-specific use directions specifically allow and provide directions for aerial application.**

AVOID DRIFT: Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Adhere to the following guidelines when aerial applications are to be made.

Spray Drift Management (Aerial Application): Avoiding spray drift at the application site is the responsibility of the applicator. The potential for spray drift is controlled by the interaction of many equipment-and-weather-related factors. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator must adhere to the following requirements when GoalTender is aerially applied:

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except the following:
   Maintain a minimum downwind buffer zone of:
   - 150 feet from dormant treefruit/nut/vine crops and overwintering sugar beets.
   - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-targeted vegetable fallow beds.
3. When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.

The use of a drift control agent may be required by local regulations. However, the drift control agent may decrease the weed control effectiveness.

Important: Aerial applicators must be familiar with the label for GoalTender and follow all applicable use precautions. Applying GoalTender in a manner other than specified in this label is done at the user's risk. Users are responsible for all loss or damage resulting from aerial spraying. In addition, aerial applicators should follow all applicable state and local regulations and ordinances. In interpreting the label and local regulations, the most restrictive limitations apply.

Chemigation Instructions

Do not apply this product through any irrigation system unless the instructions for chemigation are followed. **Do not apply GoalTender through chemigation equipment unless chemigation is allowed by Crop-Specific Use Directions.**

Apply this product only through sprinkler (center pivot, solid set, portable lateral, or low-volume (micro-sprinkler)), drip (trickle), or flood (basin) irrigation systems. Refer to use directions for specific crops for

instructions as to which type of irrigation system may be used. Do not apply this product through any other type of irrigation system.

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Sprinkler Chemigation (Foliar Spray Uses)

For sprinkler irrigation, sufficient water should be applied at the beginning of the irrigation period to insure uniform wetting of the plant and/or soil surfaces. Meter GoalTender into the sprinkler irrigation system at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to target weeds and/or soil surface. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. During sprinkler irrigation, sufficient water should be applied to insure water penetration to a depth of two inches.

AVOID DRIFT: Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Use the following guidelines when applications of GoalTender are made through sprinkler irrigation equipment:

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except for the following:
   Maintain a minimum downwind buffer zone of:
   - 150 feet from dormant treefruit, dormant vines and overwintering sugar beets.
   - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets and vegetable fallow beds.
3. When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, crop, or desirable vegetation.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

Flood (Basin) Chemigation (Soil Drench Uses)

GoalTender should be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results from GoalTender applied through flood (basin) irrigation systems are obtained when a uniform distribution and flow of irrigation water is maintained over level land.

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check calve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain functional automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Drip (Trickle) Chemigation (Soil Drench Uses)

To achieve optimum distribution of GoalTender in the soil surface, meter GoalTender at a continuous uniform rate during the middle 1/3 of the irrigation period. For best results, GoalTender should be uniformly distributed across the wetted area to help reduce the "ring effect" of weed escapes. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system.

To apply a pesticide using drip (trickle) chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pipe and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation Calibration: For Low-Volume Sprinklers (Micro-sprinklers) and Drip (Trickle) Irrigation Systems

Calculation of use rate is based on wetted area around emitters - NOT on grove acres. To determine correct amount of GoalTender, use the following formula:

1. Treated area per each emitter = A
   A = 3.14 x (radius x radius)

   Example: If the average distance from emitter to perimeter of wetted area measured at the soil surface is 13 inches, then
   A = 3.14 X (13" x 13")
   A = 3.14 X (169")
   A = 530.7 square inches

2. The area in square feet wet in each acre = B

$$B = \frac{A \times \text{emitters/acre}}{144}$$

   Example: If there are 300 emitters per acre, then

$$B = \frac{530.7 \times 300}{144} = B = 1105.6 \text{ square feet wetted per acre}$$

3. The total area (in square feet) wet by your system = C
   C = B X acres covered by system

   Example: If the system covers 20 acres, then
   C = 1105.6 square feet per acre x 20 acres
   C = 22,112 square feet wetted by system

4. Amount of GoalTender to inject = S

   Rate per treated acre of GoalTender = R

$$S = \frac{C \times R}{43{,}560} = \text{pints of GoalTender}$$

   Example: If the desired application rate per treated acre is 1 quart of GoalTender, then

$$S = \frac{22{,}112 \times 1.0}{43{,}560} = S = 0.507 \text{ pints of GoalTender should be injected into system.}$$

Note: Select the proper rate based on weed spectrum and desired length of control (See **Rate Ranges** section below).

Chemigation Systems Connected to Public Water Systems

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Mixing Directions

Shake well before use. Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicides to the spray tank. The order of addition to the spray tank should be (1) wettable powders, (2) flowables and (3) soluble liquids. Complete filling of the spray tank with water.

Use of Surfactants: For all applications of GoalTender where postemergence weed control is desired **(except garlic and onions)**, add a minimum of 2 pints of 80% active nonionic surfactant (cleared for application to growing crops) per each 100 gallons of spray. The addition of 4 pints of nonionic surfactant is specified to enhance postemergence activity when hard water (greater than 600 ppm) is used. Maintain agitation until spraying is completed.

Tank Mixing Precautions:

- Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.
- Do not exceed specified application rates. Do not tank mix this product with another pesticide that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

Tank Mix Compatibility Testing: A jar test is specified prior to tank mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Sprayer Clean-up: Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residues of GoalTender remaining in spray equipment may damage other crops. The addition of a non-ionic surfactant to equipment flushing waters at the rate of 1 quart per 100 gallons is specified to aid in removal of residues of GoalTender.

Crop-Specific Use Directions

Artichoke (Globe)

Post-Directed Spray Application

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 3	**Application Method:** Apply as a directed spray to the soil surface between the rows and at the base of artichoke plants in a minimum spray volume of 40 gallons per acre. **Timing to Crop:** Apply after completion of ditching operations. Separate applications of up to 2 pt/acre may be made 8 to 10 weeks apart or a single application of up to 3 pt/acre may be made. **Timing to Weeds:** Preemergence up to 8 leaf stage.

Precautions:

- Do not apply over-the-top. Contact with direct spray or drift will cause injury to artichoke fronds or severe injury to buds or flowers.
- Application of GoalTender to artichoke plantings should be delayed a minimum of 60 days after cutting back or transplanting.

Restrictions:

- Do not apply more than 3 pints of GoalTender per acre per season as a result of a single application or multiple applications.
- **Preharvest Interval:** Do not apply within 5 days of harvest.

Key Weeds Controlled

Preemergence	Postemergence
cheeseweed (malva)	cheeseweed (malva)
groundsel, common	groundsel, common
lambsquarters, common	mustard, common yellow
mustard, common yellow	nettle, burning
oxalis (bermuda buttercup) †	oxalis (bermuda buttercup)
shepherdspurse	shepherdspurse
sowthistle, annual	sowthistle, annual

† Suppression

Broccoli / Cabbage / Cauliflower

Pre-Transplant (Preplant) Application for Preemergence Broadleaf Weed Control

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 - 1	**Pre-Transplant Application Only:** Apply broadcast to final seedbed prior to transplanting. Use lower rate in the rate range on coarse textured soils with less than 1% organic matter. Use the highest rate in the rate range on medium to fine textured soils or soils containing greater than 1% organic matter. Transplanting should be accomplished with minimal soil disturbance and soil left undisturbed during the time weed control is desired.

Precautions:

- Pre-transplant applications may result in initial, but temporary, crop injury (leaf cupping or crinkling) and is enhanced if crop leaves come in direct contact with treated soil. Crop will rapidly outgrow this condition and develop normally. Severe crop injury may result if transplants are under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides or storage conditions. The use of transplants less than 5 weeks old or use of extremely succulent transplants grown in containers less than 1 inch square, may increase the severity of crop injury. Hardening off, increasing the age of transplants or increasing the size of the rooting containers will lessen the possibility and/or severity of potential crop injury.
- GoalTender will assist in early season annual grass control, however, a herbicide program for preemergence or postemergence control of annual grasses is specified.
  Note: Do not apply GoalTender if an acetanilide herbicide such as Dual Magnum herbicide, Lasso herbicide, or Ramrod herbicide has been applied to the field during the current growing season as severe crop injury may occur.
- Do not apply GoalTender as a preemergence treatment to direct-seeded broccoli, cabbage or cauliflower.
- Do not apply GoalTender post-transplant or over-the-top of broccoli, cabbage or cauliflower.
- Applications to muck soils may result in partial weed control or suppression.

• Furrow and drip irrigation immediately after transplanting and under high temperatures can result in increased crop injury. Sprinkler irrigation is specified during early establishment of transplants. If these conditions cannot be met, GoalTender herbicide should not be used.
Crop-Specific Restrictions: • Do not apply more than 1 pint of GoalTender per treated acre per season.

Key Weeds Controlled:

Preemergence
carpetweed pigweed, redroot purslane, common smartweed, Pennsylvania

Cacao (Bearing And Nonbearing)

(For Use Only in Hawaii)

GoalTender may be applied as a pre-transplant treatment or to established or recently transplanted cacao.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 - 4	**Pre-transplant Application:** Up to 2 pints per broadcast acre may be applied as a pre-transplant application. **Application to Established Plantings:** In established plantings, including recently transplanted cacao plants, apply as a directed spray to the orchard floor. Use higher rates in rate range and increase spray volume to control dense growth of existing weeds or for extended residual preemergence weed control.
Precautions: • Do not apply preplant or preemergence to direct-seeded cacao. • GoalTender should be applied to only healthy growing trees/transplants of suitable size to allow directed sprays. Avoid spray contact with foliage.		
Crop-Specific Restrictions: • Do not apply more than 4 pints of GoalTender per acre as a single application or more than 12 pints per acre per year. • **Preharvest Interval:** Do not apply GoalTender within 1 day of harvest.		

Key Weeds Controlled

Preemergence	Postemergence
ageratum buttonweed crotalaria purslane, common spurge, garden	purslane, common spurge, garden

Citrus (Nonbearing)

Citrus, such as Calamondin, Chironja, Citrus Citron, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Pummelo, Satsuma Mandarin, Sour Orange, Sweet Orange, Tangelo, Tangerine, Tangor

GoalTender may be applied only in non-bearing citrus orchards. Apply only as a directed spray to the orchard floor avoiding contact with citrus foliage.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	3	**Preemergence Weed Control:** Up to 3 pt/acre may be applied for residual preemergence weed control. **Postemergence Weed Control:** The 3 pint/acre rate will control weeds up to 4 inches tall. Weeds greater than 4-leaf or 4 inches tall may be partially controlled. Use sufficient spray volume for complete and uniform coverage of weeds. Increase the spray volume with increased weed height and density to ensure complete coverage.
Postemergence	1 - 3	

Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions.

- **Preemergence Use:** For residual control of grass weeds, GoalTender may be tank mixed with grass herbicides labeled for use in citrus.
- **Postemergence Use:** For broader spectrum postemergence control of emerged grass and broadleaf weeds, GoalTender may be tank mixed with paraquat (Gramoxone herbicide) or glyphosate.

Precautions:

- Do not apply during periods of new citrus foliage growth. Applications should be made after foliage has fully expanded and hardened off. Avoid direct spray contact with citrus foliage.

Crop-Specific Restrictions:

- Apply GoalTender only to nonbearing citrus (trees that will not bear fruit for one year).
- Do not apply more than 3 pints (1.5 lbs ai) of GoalTender per acre per year as a result of a single or multiple applications.

Key Weeds Controlled

(Arizona and California)		(Florida, Louisiana and Texas)	
Preemergence	**Postemergence**	**Preemergence**	**Postemergence**
burclover cheeseweed (malva) fiddleneck, coast filaree, broadleaf filaree, redstem filaree, whitestem groundsel, common henbit knotweed, prostrate lambsquarters, common lettuce, prickly pigweed, redroot purslane, common redmaids rocket, London shepherdspurse sowthistle, annual spurge, prostrate spurge, spotted	cheeseweed (malva) fiddleneck, coast filaree, broadleaf † filaree, redstem † filaree, whitestem † groundsel, common henbit minerslettuce nettle, burning pigweed, redroot redmaids shepherdspurse sowthistle, annual	cudweed, narrowleaf eveningprimrose, cutleaf †† groundcherry, cutleaf lambsquarters, common nightshade, American black nightshade, black pepperweed, Virginia pigweed, redroot poinsettia, wild pusley, florida sida, prickly (teaweed) smartweed, pennsylvania sowthistle, annual spurge, prostrate spurge, spotted	balsamapple cudweed, narrowleaf ††† eveningprimrose, cutleaf †† groundcherry, cutleaf groundcherry, Wright lambsquarters, common morningglory, annual nightshade, American black nightshade, black pepperweed, Virginia pigweed, redroot poinsettia, wild purslane, common pusley, florida sida, prickly (teaweed) smartweed, pennsylvania sowthistle, annual

† GoalTender at the 3 pt/acre will provide control of filaree and other weeds up to 4-inch stage. Applications to weeds beyond the 4-inch stage may result in partial control.

†† Highest rate and/or multiple applications may be required for acceptable control.

††† Maximum 0.5-inch diameter

Clary Sage

Clary Sage *(Salvia sclarea)* Grown and Utilized in the Essence Industry
(For Use Only in North Carolina)

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.5	GoalTender may be applied to established clary sage for control of henbit *(Lamium amplexicaule*) and other winter annual broadleaf weeds during the winter and spring season. Apply shortly after the first flush of henbit is in the 2- to 4-leaf stage of growth. Additional applications may be required to control subsequent weed flushes through the spring season. After treatment, henbit will stop growing and slowly die. Increase the spray volume if weed growth is dense.
Precautions: • Clary sage may respond to the topical application of this product with some marginal leaf burn, but recovery is rapid.		
Crop-Specific Restrictions: • Do not apply more than 3 pints per acre per year.		

Coffee (Bearing And Nonbearing)

(For Use Only in Hawaii)

GoalTender may be applied to established coffee, recently transplanted coffee, or as a pre-transplant treatment. In established non-dormant coffee, apply as a directed spray avoiding contact with crop foliage. Newly established transplants should be healthy and well established and of sufficient size to allow use of directed sprays without contacting crop foliage.

GoalTender may be applied over-the-top of dormant coffee transplants. Transplants are considered to be dormant when active terminal growth has ceased and terminal buds have formed. Application over-the-top of coffee plants after buds start to swell (a sign that new growth has resumed) may result in crop injury.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 - 4	**Preemergence Weed Control:** ● Apply as a directed spray to the orchard floor beneath established coffee plants. ● Up to 2 pints per acre may be applied as a pre-transplant application prior to transplanting coffee plants. **Postemergence Weed Control:** Increase the spray volume when weed growth is dense or trash is present; or use a higher rate within the rate range for extended residual preemergence weed control.
Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Apply tank mixes only as a directed spray.		
Precaution: To prevent foliar injury, do not apply during periods of rapid new growth or allow spray or drift to contact actively growing foliage.		

Crop-Specific Restrictions:

- Do not apply preplant or preemergence to direct-seeded coffee.
- Do not apply more than 4 pints per broadcast acre of GoalTender in a single application or 12 pints per broadcast acre per year.
- **Preharvest Interval:** Do not apply GoalTender within one (1) day of harvest.

Key Weeds Controlled:

Preemergence	Postemergence
ageratum buttonweed crotalaria purslane, common spurge, garden	purslane, common spurge, garden

Conifer Seedbeds, Transplants, Container Stock And Selected Field Grown Deciduous Trees

General Use Precautions and Restrictions:

- Do not apply GoalTender in an enclosed greenhouse structure as injury to plant foliage may result.
- Do not store or transport treated container stock in an enclosed structure until completion of 4 irrigations (minimum 21 days) as injury to non-labeled plants may occur.
- Apply GoalTender only to healthy conifer stock. Do not apply GoalTender to conifers that are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.
- Do not graze or harvest livestock forage from treated areas.

Key Weeds Controlled: When GoalTender is applied preemergence or postemergence at specified dosages and weed stages.

barnyardgrass †
bedstraw, catchweed
bittercress, lesser
bluegrass, annual †
buckwheat, wild
burclover
carpetweed
clover, red †
clover, white †
cocklebur, common
crabgrass, large †
fiddleneck, coast †
filaree, broadleaf
filaree, redstem
fireweed (from seed)
flixweed
foxtail, giant †
goosegrass †
groundcherry, cutleaf
groundcherry, wright
groundsel, common
henbit
jimsonweed
knotweed, prostrate
mustard, blue
mustard, tumble
mustard, wild
nettle, burning
nightshade, black
nightshade, hairy
oats, wild
orach, red
pepperweed, yellowflower
pigweed, prostrate
pigweed, redroot
pimpernel, scarlet
purslane, common
redmaids
rocket, London
sandspurry, red
shepherdspurse †
sida, prickly
smartweed, Pennsylvania
sorrel, red (from seed)
sowthistle, annual
speedwell, birdseye
spurge, prostrate ††
spurge, spotted ††

ladysthumb	spurry, corn
lambsquarters, common	tansymustard
lettuce, prickly	thistle, bull ††
mallow, little	thistle, Russian
mayweed	velvetleaf
minerslettuce	witchgrass
morningglory, ivyleaf †	woodsorrel, yellow ††
morningglory, tall †	

† Highest rate and/or multiple applications may be required for acceptable control.
†† Preemergence control only.

Conifer Seedbeds

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

GoalTender provides both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

Seeded conifers are tolerant to preemergence and postemergence applications of GoalTender. For weed control during the establishment of conifer seedlings, GoalTender can be applied after seeding of conifers, but prior to emergence. For weed control in emerged conifers, GoalTender may be applied over-the-top, but application should be delayed a minimum of 5 weeks after seedling emergence. If application is made during cool, cloudy weather, make certain that seedlings have hardened-off prior to spraying.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 - 2	**Application after planting, but prior to emergence of conifer seedlings:** Where grass weeds are present, apply 1 to 2 pints of GoalTender per acre. In known areas of high weed competition, apply 2 pints of GoalTender per acre. Broadcast to beds and irrigate with ½ to ¾ inch of sprinkler irrigation before weed emergence. GoalTender is most effective on annual grasses when applied preemergence.
Postemergence	0.5 - 1	**Application after emergence of conifer seedlings:** Application should be made to seedling weeds less than 4 inches in height (seedling grasses not exceeding the 2-leaf stage). Depending on subsequent weed flushes, multiple applications may be necessary to achieve season-long weed control.
Chemigation: GoalTender may be applied at labeled rates through sprinkler irrigation systems. For center pivot irrigation systems, apply the specified dosage of GoalTender per acre metered at a continuous uniform rate during the entire irrigation period, otherwise meter GoalTender at a continuous uniform rate during the middle 1/3 of the irrigation period. When applying by sprinkler irrigation, follow directions given in the Chemigation Instructions section of this label.		

Precautions:

- Occasionally spotting, crinkling, or flecking may appear on leaves of conifers. Leaves that receive direct spray or drift may be injured, but typically outgrow this condition rapidly and develop normally.

Crop-Specific Restrictions:

- Do not apply more than 4 pints of GoalTender per acre per year.

GoalTender may be applied to conifer seedbeds of the following species:
Important: When applied as directed, the conifer species listed on this label have shown tolerance to GoalTender. It is impossible, however, to evaluate this product on all varieties, biotypes and cultivars of listed species under all possible growing conditions. Until familiar with results under local growing conditions, the user should exercise reasonable judgment and caution with this product. Limit application of this product to a few plants in a small area to determine plant tolerance and extent of injury if such occurs, prior to initiating large-scale applications.

Douglas fir	*Pseudotsuga menziesii*
Fir	Fraser (*Abies fraseri)* Grand (*Abies grandis)* Noble (*Abies procera*)
Hemlock	Eastern hemlock (*Tsuga canadensis)*
Pine	Austrian (*Pinus nigra)* Eastern White (*Pinus strobus)* Himalayan (*Pinus wallichiana)* Jack (*Pinus banksiana)* Loblolly (*Pinus taeda)* Lodgepole (*Pinus contorta)* Longleaf (*Pinus palustris)* Monterey (*Pinus radiata)* Mugo (*Pinus mugo)* Ponderosa (*Pinus ponderosa)* Scotch (*Pinus sylvestris)* Shortleaf (*Pinus echinata)* Slash *(Pinus elliottii)* Virginia *(Pinus virginiana)*
Spruce	Blue (*Picea pungens)* Dwarf Alberta (*Picea glauca Conica)* Norway (*Picea abies)* Sitka (*Picea sitchensis)*

Conifer Transplants And Container Stock (Includes 2-0 Seedling And Christmas Tree Plantings)

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Many container-grown conifers and conifer transplants are tolerant to preemergence and postemergence applications of GoalTender. Applied postemergence, GoalTender provides postemergence control of emerged weeds and preemergence residual control of many broadleaf weeds and grasses (see Key Weeds Controlled) at the beginning of this section.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 4	**Transplanted and Container Grown Conifers:** For best results, preemergence applications should be made immediately after transplanting seedlings or to weed-free container stock. Postemergence applications should be made to weeds less than 4 inches in height. Two applications may be necessary, in fall-transplanted conifer fields, for season-long weed control. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, enhances the activity of GoalTender on emerged weeds.
Precautions: • Do not make over-the-top applications during periods of active conifer growth. Apply only before bud break or after new terminal growth has hardened off.		
Crop-Specific Restrictions: • Do not apply more than 4 pints of GoalTender per acre in a single application or more than 8 pints per acre per year.		

In addition to those conifer species listed under the Conifer Seedbed section, the following conifer species have been shown to be tolerant to GoalTender:

Arborvitae	*Thuja occidentalis* *Thuja orientalis*
Juniper	*Juniperus chinensis* *Juniperus horizontalis* *Juniperus procumbens* *Juniperus sabina* *Juniperus scopulorum*
Red cedar	*Juniperus virginiana*
Western Hemlock	*Tsuga heterophylla*
Yew	*Taxus species*

Selected Field-Grown Deciduous Trees

Listed field-grown deciduous trees are tolerant only to directed spray applications of GoalTender. GoalTender provides both preemergence and postemergence control of listed broadleaf weeds and grasses.

Timing to Crop: Apply GoalTender to established deciduous trees or after transplanting. For optimum weed control, applications should be made prior to weed germination. Apply only as a directed spray to soil beneath the trees.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Early postemergence	1 - 3	GoalTender may be applied to established deciduous trees or after transplanting as a single or split application. Apply as a directed spray to the soil surface. Use of spray shields to reduce exposure of foliage and bark is specified. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, will enhance herbicidal activity on emerged weeds. **Spot Application:** Spot treatments at specified rates may be used to control localized weed infestations. See use directions for Spot Application in the Application Methods and Cultural Practices section.

Tank Mixing: For broader spectrum control, GoalTender may be tank mixed with other preemergence or postemergence herbicides registered for this use in deciduous trees. Refer to Mixing Directions section for Tank Mixing Precautions.

Precautions:

- For maximum crop safety, directed applications should be prior to budbreak in the spring or after trees have initiated dormancy in the fall. Avoid contact of spray or drift with foliage or stems with green bark. Application after bud swell may result in crop injury. If a non-dormant application is required due to weed competition, apply only after foliage has fully expanded and hardened off. Use only directed sprays and spray shields to prevent spray contact with stems with green bark or foliage.
- Do not apply GoalTender to trees that have been weakened or are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, wind injury, drought, flooding, previously applied pesticides, insects, or winter injury as severe injury may result.

Crop-Specific Restrictions:

- Do not apply more than 3 pints of GoalTender per acre per year.
- Do not apply to bearing treefruit, nut and vine crops. For selected bearing treefruit, nut and vine crops, refer to Treefruit/Nut/Vine section of this label for use directions.
- Do not graze or feed livestock forage cut from areas treated with GoalTender.

GoalTender may be applied to the following deciduous tree species:

Almond ††	*Prunus spp.*
Apple ††	*Malus X domestica*
Apricot ††	*Prunus spp.*
Ash, Green Ash, White	*Fraxinus pennsylvanica* *Fraxinus americana*
Birch, River	*Betula nigra*
Cherry ††	*Prunus spp.*
Chestnut ††	*Castanea spp.*
Crabapple ††	*Malus spp.*
Cottonwood	*Populus spp.*
Dogwood	*Cornus florida*
Eucalyptus	*Eucalyptus viminalis* *Eucalyptus pulverulenta* *Eucalyptus camaldulensis*
Filbert ††	*Corylus spp.*
Lilac	*Syringa vulgaris*
Locust, Black	*Robinia pseudoacacia*
Maple, Black † Maple, Red † Maple, Sugar †	*Acer nigrum* *Acer rubrum* *Acer saccharum*
Myrtle, Crepe	*Lagerstroemia indica*
Nectarine ††	*Prunus spp.*
Nut, Hickory ††	*Carya sp.*
Nut, Macadamia	*Macadamia ternifolia*
Oak, Chestnut Oak, Cherrybark Oak, Nutt All Oak, Pin Oak, Red Oak , Water Oak, Willow	*Quercus prinus.* *Quercus pagoda* *Quercus nuttallii* *Quercus palustris* *Quercus. rubra* *Quercus nigra* *Quercus phellos*
Olive, Russian	*Elaeagnus angustifolia*
Poplar Poplar, Tulip	*Populus* spp. *Liriodendron tulipifera*

Peach ††	*Prunus persica*
Pear ††	*Pyrus spp.*
Pecan ††	*Carya spp.*
Pistachio ††	*Pistacia vera*
Plum ††	*Prunus spp.*
Prune ††	*Prunus spp.*
Redbud	*Cercis canadensis*
Sweetgum	*Liquidambar styraciflua*
Sycamore	*Platanus occidentalis*
Walnut, Black ††	*Juglans nigra*

† Do not apply to maple trees used for production of maple sap or maple syrup.
†† Apply only to nonbearing trees. For bearing treefruit, nut and vine crops, refer to specific use directions in the Treefruit/Nut/Vine section of this label.

Corn

FOR USE ONLY ON FIELD CORN IN CONJUNCTION WITH THE USDA WITCHWEED ERADICATION PROGRAM IN NORTH CAROLINA AND SOUTH CAROLINA

Apply GoalTender only as a directed spray from May through August for preemergence and postemergence control of witchweed *(Striga asiatica)*. Corn must be a minimum of 24 inches tall. Examine witchweed infested fields during the early part of the growing season to determine uniformity of corn stand and grass weed pressure. If necessary, cultivate weed-infested fields prior to initial application of GoalTender to allow for optimum soil coverage during the initial application. Fields treated with GoalTender should be inspected regularly for any breakthrough of witchweed. If breakthrough occurs, a second application should be made as soon as possible after appearance of witchweed. Repeat treatments should occur prior to bloom stage to prevent seed set.

Weed Control	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence	1 – 1.5	**Initial Application:** Apply as a directed spray over the entire row surface at the rate of 1 pint per acre. Use up to 3 pints per acre in areas of heavy witchweed infestation. Use a minimum spray volume of 20 gallons per acre and a non-ionic surfactant at the rate of 2 pints per 100 gallons of spray.
Postemergence	0.5 - 1	**Repeat Applications:** In case of witchweed breakthrough a repeat application may be made at 0.5 to 1 pints per acre.
Precautions: • Do not spray over the top of the corn, as this may result in severe corn injury. Spray should contact only the lower 3 to 8 inches of the corn stalk and any leaves in this zone. Spray droplets contacting the lower leaves will cause necrotic spotting or streaking of sprayed tissue.		
Crop-Specific Restrictions: • Do not apply more than 2.5 pints (1.25 lb active) of GoalTender per acre during the growing season. • Do not apply any apply within 60 days of harvest. • Do not use corn plants from a treated field for green chop, ensilage, forage, or fodder.		

Cotton

Application Methods and Equipment: GoalTender may be applied as a post-direct spray to cotton a minimum of 6 to 8 inches tall. Care must be exercised to avoid spray contact with the cotton leaves. Use rigid precision ground spray equipment and spray shields to prevent spray contact with cotton foliage. Use branch lifters or shields, as necessary, to avoid contact of directed sprays with cotton plant.

Accurate, placement of spray nozzles is essential for uniform coverage of weeds and to minimize injury to cotton plants. Use a minimum broadcast spray volume of 20 gallons per acre and operate the sprayer at the minimum spray pressure specified by the spray nozzle manufacturer. GoalTender may be applied as a post-direct spray with only 2 flat fan nozzles per row (1 nozzle on each side of the row). For optimum coverage, use 4 flat fan nozzles per row (2 nozzles on each side of the row). The 2 forward nozzles should point forward and downward while the rear nozzles should point to the rear and downward. With either sprayer setup, nozzles should be carefully adjusted to cover the weed foliage with minimum contact to cotton plants. GoalTender may also be applied as a band application. **Do not use hollow cone nozzles.**

Tank Mixing: For control of additional broadleaf and grass weeds, GoalTender may be applied as a postemergence directed spray in tank mix combination with other herbicides registered for postemergence use in cotton (see Tank Mixing Precautions under Mixing Directions).

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.5 - 1	Apply as a post-directed spray. For optimum control, use the 1 pint per acre rate on actively growing weed seedlings with no more than 4 true leaves (not counting cotyledon leaves). Effective control of succulent weeds at the 2- to 3-leaf stage can usually be obtained at the 0.5 pint per acre rate. See Mixing Directions for surfactant recommendations. Where available, irrigation may be applied prior to application of GoalTender to encourage maximum weed emergence. Irrigation following application will improve preemergence activity of GoalTender against nightshade and groundcherry species.

Precautions:

- Do not apply to cotton less than 6 inches tall or severe crop injury will result.
- Exercise care to avoid spray contact with cotton leaves. Leaves accidentally sprayed will exhibit necrotic (dead) spots and may be dropped from the plant. Crop injury may be enhanced if application is made when excessive soil moisture is present or rainfall occurs immediately after application, however, cotton will outgrow this condition and develop normally.

Crop-Specific Restrictions:

- **Western Cotton (AZ and CA):** Do not apply more than 1 pint (0.5 lb active) of GoalTender per acre in a single application, or more than a total of 2 pints (1.0 lb active) of GoalTender per broadcast acre per season as a result of multiple applications. Do not apply within 75 days of harvest.
- **Southern Cotton (All other states):** Do not apply more than 1 pint (0.5 lb active) of GoalTender per acre of per season as a result of a single application or multiple applications. Do not apply within 90 days of harvest.

Key Weeds Controlled:

Postemergence	
cocklebur, common	nightshade, black
croton, tropic	nightshade, hairy
groundcherry, cutleaf	pigweed, redroot
groundcherry, Wright	poinsettia, wild †
jimsonweed	purslane, common
lambsquarters, common	sesbania, hemp
morningglory, annual (up to 6 leaf)	sicklepod ††
nightshade, American black	sida, prickly (teaweed) †
	smartweed, pennsylvania
	velvetleaf

† Multiple applications may be required for acceptable control.
†† Post-direct applications of GoalTender will control or suppress seedlings not exceeding the one true leaf stage.

Cottonwood

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 3	GoalTender may be applied as a single or split application. Apply as a directed spray to soil at the base of cottonwood trees. Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage. The addition of a non-ionic surfactant at 2 pints per 100 gallons of spray will enhance the postemergence activity of GoalTender on emerged weeds.
Precautions: • Apply GoalTender immediately after transplant only to dormant healthy cottonwood stock. • In established stands, do not allow sprays of GoalTender to contact cottonwood foliage. In newly established cottonwood plantings, use spray shields, if necessary, to prevent exposure of green bark and foliage.		
Crop-Specific Restrictions: • Do not apply more than 3 pints per acre of GoalTender in a single application or more than 9 pints per acre per year.		

Key Weeds Controlled:

groundsel, common	mustard, hedge
knotweed, prostrate	shepherdspurse
lambsquarters, common	smartweed, Pennsylvania

Eucalyptus

Apply GoalTender for preemergence and postemergence control of listed broadleaf weeds in established eucalyptus plantings.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 3	**Directed Spray:** GoalTender may be applied as a single or split application. Apply as a directed spray to soil at the base of eucalyptus trees. Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage. The addition of a non-ionic surfactant at the rate of 2 pints per 100 gallons of spray, will enhance the postemergence activity of GoalTender on emerged weeds. **Over-the-Top Application:** In new plantings, apply GoalTender just before or immediately after transplanting eucalyptus seedlings that are in a dormant condition (i.e., leaves may be present, but terminal growth has hardened off and terminal buds have formed). In established plantings, GoalTender may be applied as an over-the-top spray when plants are in a dormant condition.

Precautions:

- At transplant, apply GoalTender only to healthy "dormant" healthy eucalyptus stock. In established plantings, use spray shields, if needed, to prevent exposure of foliage and bark of small and/or actively growing plants.
- To avoid phytotoxicity, make over-the-top applications only to eucalyptus trees in a dormant condition. Do not make over-the-top applications after bud break and resumption of active growth.

Crop-Specific Restrictions:

- Do not apply more than 3 pints of GoalTender per acre in a single application or more than 9 pints per acre per year.

Key Weeds Controlled:

Preemergence	Postemergence
burclover	cheeseweed (malva)
cheeseweed (malva)	fiddleneck, coast
fiddleneck, coast	filaree, broadleaf †
filaree, broadleaf	filaree, redstem †
filaree, redstem	filaree, whitestem †
filaree, whitestem	groundsel, common
groundsel, common	henbit
henbit	minerslettuce
knotweed, prostrate	nettle, burning
lambsquarters, common	pigweed, redroot
lettuce, prickly	redmaids
pigweed, redroot	shepherdspurse
redmaids	sowthistle, annual
rocket, London	
shepherdspurse	
sowthistle, annual	
spurge, prostrate	
spurge, spotted	

† At the 3-pint rate, GoalTender will provide control of filaree up to the 6-leaf stage.

Use on Fallow Beds

(Not for use prior to planting soybeans in California)

Used alone or in tank mix combination with glyphosate, GoalTender provides preemergence and/or postemergence control of winter annual broadleaf weeds on land to be planted to crops.

Prior to planting, treated fallow beds should be thoroughly tilled (incorporated) to a depth of at least 2.5 inches. GoalTender is no longer herbicidally effective once the active layer in the soil surface is disrupted by soil incorporation.

Aerial Application: GoalTender may be aerially applied for weed control in fallow beds. Follow requirements for Aerial Application in the Product Information section of this label.

Minimum Treatment to Planting Intervals for listed crops:

	Minimum Treatment-to-Planting Interval	
Direct Seeded Crops	**GoalTender (up to 0.5 pint/acre)**	**GoalTender (>0.5 to 1 pint/acre)**
carrot	90 days	90 days
cotton	7 days	7 days
potato	60 days	60 days
sugar beet	60 days	90 days
other root/tuber crops	90 days	90 days
onions	180 days	180 days
other bulb vegetables	180 days	180 days
cabbage	90 days	90 days
cauliflower	90 days	90 days
other brassica crops	120 day	120 days
lettuce	90 days	120 days
other leafy vegetables (except brassica crops)	120 days	120 days
pepper	90 days	120 days
tomato	60 days	120 days
other fruiting vegetables	120 days	120 days
cantaloupe	60 days	90 days
squash	90 days	120 days
watermelon	60 days	60 days
other cucurbits	90 days	120 days
dry beans	60 days	60 days
peanut	60 days	60 days
other legume vegetables	60 days	60 days
safflower	60 days	60 days
Soybeans (Except California)	7 days	7 days
cereal grains: Including barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, and wild rice	10 months	10 months
cotton and soybean	(see specific labeling for fallow beds to be planted to cotton or soybeans)	

Transplanted Crops	Minimum Treatment-to-Planting Interval	
	GoalTender (up to 0.5 pint/acre)	GoalTender (>0.5 to 1 pint/acre)
celery	30 days	30 days
conifer	0 days	0 days
garlic	0 days	30 days
grape/kiwi	0 days	0 days
onion	0 days	30 days
pepper	30 days	30 days
strawberries	30 days	30 days
tomato	30 days	30 days
treefruit/nut/citrus	0 days	0 days

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 - 1	Use 20 or more gallons of spray volume per acre and increase spray volume for dense weed growth. Use the 0.5 pint per acre rate for up to 4 weeks of preemergence control and postemergence control of susceptible weeds up to 4-leaf stage. Use the 1 pint per acre rate for up to 8 weeks of preemergence control and postemergence control of susceptible weeds up to 6-leaf stage. Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks after application. A tank mix with glyphosate is specified if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains, annual grasses or under unfavorable environmental conditions. **Outside of California:** For enhanced contact activity (burndown/suppression) tank mix 3.25 fl oz of GoalTender with the labeled rate of either glyphosate or paraquat (Gramoxone). Apply at the application rate and weed growth stages specified in the respective tank mix product label.

Precautions:

- **Failure to achieve thorough and complete incorporation, or to follow the** specified **treatment-planting interval, may result in stand reduction and/or vigor reduction of the planted crop.**
- Crop injury may be enhanced if newly seeded crops or transplants are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.
- **Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result.**

Crop-Specific Restrictions:

- Do not apply more than 1 pint of GoalTender per acre per fallow season.

Key Weeds Controlled: GoalTender provides preemergence and postemergence control of the following weeds on fallow beds: †

buttercup, smallflower	mustard species
cheeseweed (malva)	nettle, burning
eveningprimrose, cutleaf ††	oxalis
fiddleneck, coast	pigweed, redroot
filaree, broadleaf	purslane, common
filaree, redstem	redmaids
geranium, Carolina	rocket, London
groundcherry, cutleaf	shepherdspurse
groundsel, common	sida, prickly
henbit	sowthistle, annual
ladysthumb	velvetleaf (wild cotton)
minerslettuce	

† Thorough spray coverage is essential to maximize the postemergence activity of GoalTender. For postemergence control when applied by air, a tank mixture of GoalTender with either glyphosate or paraquat (Gramoxone) is specified.

†† Requires maximum rate and/or multiple applications for effective control.

Fallow bed use prior to transplanting peppers or strawberries grown in plastic culture

GoalTender herbicide may be applied broadcast or banded as a fallow bed application to pre-formed beds prior to transplanting peppers or strawberries grown in plastic culture. The GoalTender use rate is up to 1 pint per broadcast acre. It is recommended that soil moisture be used to activate GoalTender soon after application. This can be done by sprinkler irrigation with approximately 1/2 inch of sprinkler irrigation and then applying the plastic any time during the 30-day treatment to planting interval. Or, if there is adequate existing soil moisture, apply plastic to the beds as soon as possible after application and allow the moisture which condenses and accumulates beneath the plastic to thoroughly wet the treated soil.

Mechanical incorporation of the fallow-bed treatment prior to laying plastic is not required. Not disturbing the soil may allow for extended weed control. Not incorporating increases the potential for crop injury, especially under wet conditions. Therefore, the treatment should be incorporated if the risk of crop injury is not acceptable. The minimum treatment to planting interval is 30 days.

Fallow Land

(For Use Only In Idaho, Oregon and Washington)

Used alone or in a tank mix combination with glyphosate, GoalTender provides preemergence and/or postemergence control of listed annual broadleaf weeds in a fallow land system. GoalTender may be used to reduce weed growth prior to the establishment of a dry soil mulch. Use is restricted to summer fallow on land that will be planted the following year to winter wheat, barley or oats.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.25 - 1	**GoalTender Alone:** Preemergence weed control occurs as seedling weeds come in contact with the soil-applied herbicide during emergence. Postemergence weed control is most effective when GoalTender is applied to seedling weeds less than 4 inches in height. Apply GoalTender in 15 or more gallons of water per acre and increase spray volume if weed growth is dense. Use of an 80% active nonionic surfactant cleared for use on growing crops is specified for optimum postemergence weed control.
Tank Mixing: For postemergence control of annual grass weeds, 0.25 - 1 pt/acre of GoalTender may be tank mixed with labeled rates of glyphosate. Follow label instructions for Fallow and Reduced Tillage Systems for the glyphosate product. Refer to Mixing Directions section for Tank Mixing Precautions.		
Use Restrictions for Fallow Land: • Do not apply more than 1 pint per acre per application or more than 1 pint per use season.		

Key Weeds Controlled: GoalTender provides preemergence and postemergence control of the following weeds on fallow land:

fiddleneck, coast henbit lettuce, prickly (china lettuce) mustard, blue (purple mustard) mustard, tumble (Jim hill mustard)	pigweed, redroot purslane, common shepherdspurse sowthistle, annual

Garbanzo Beans

(For Use Only in Arizona and California)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5	Apply after planting but prior to weed or crop emergence as a single broadcast application using a spray volume of 20 or more gallons of water per acre.
Precautions: • Garbanzo beans are tolerant to preemergence application of GoalTender, however, under certain conditions, severe but temporary crop injury may occur. A heavy splashing rain shortly after crop emergence or wet soil conditions during early growth stages can cause leaf cupping, crinkling, stunting or defoliation of the garbanzo seedlings. Injury, when it occurs, it is usually limited to the first few leaves that develop after plants emerge from the soil. Delays in crop development and/or maturity may result, but Garbanzo beans do recover with little to no impact on yield.		

Crop-Specific Restrictions:

- Do not apply more than 0.5 pint per acre of GoalTender in a single application.
- Do not use bean vines for livestock feed or hay.
- Maximum total application rate per year is 1.5 lbs ai/A

Key Weeds Controlled:

Preemergence
groundsel, common
mallow, little
rocket, London
shepherdspurse

Garlic

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

For optimum preemergence weed control, the soil surface should be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct Seeded Garlic (Postemergence Application):		
Weed Control	**Rate (per acre)**	**Specific Use Directions**
Postemergence	1 - 2 fl oz	**Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Apply GoalTender at 1 to 2 fl oz per acre to direct seeded garlic that has at least 3 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 1 to 2 fl oz per acre may be applied up to a maximum of 1 pint (16 fl oz) per acre per use season. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application to weeds at later than the 4 leaf growth stage may result in reduced weed control.
Postemergence	0.25 – 0.5 pt	**Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington:** Apply GoalTender at 0.25 to 0.5 pt per acre to seeded garlic that has at least 2 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 to 0.5 pt per acre may be applied up to a maximum of 1.25 pints per

		acre per use season. For optimum postemergence weed control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application to weeds at later than the 4 leaf growth stage may result in reduced weed control.
Postemergence	0.25 pt	**All Other States:** Apply GoalTender at 0.25 pt per acre to direct seeded garlic that has at least 2 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 pt per acre may be applied up to a maximum of 1 pint per acre per use season. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application to weeds at later than the 4 leaf growth stage may result in reduced weed control.

Direct Seeded Garlic (California Only)		
Weed Control	**Rate (per/acre)**	**Specific Use Directions**
Preemergence Postemergence	0.5 pt	**Application after planting but prior to garlic emergence:** Apply GoalTender after planting, but prior to crop emergence, for preemergence control of listed broadleaf and grass weeds using ground, air or sprinkler irrigation (chemigation). **Aerial application:** Apply in a minimum spray volume of 10 gallons per acre. Follow Aerial Application instructions and precautions in the Product Information section of this label. **Postemergence directed application:** Apply GoalTender as a directed spray to garlic that is at least 12 inches tall. Accurate, uniform placement of directed postemergence sprays is essential for effective weed control and to minimize injury to garlic plants. Use low-pressure sprays and a minimum spray volume of 20 gallons per acre. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application to weeds at later than the 4 leaf growth stage may result in reduced weed control. **Sprinkler irrigation (portable lateral or solid set) preemergence or postemergence:** Apply GoalTender at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Apply after planting but prior to garlic emergence or postemergence when garlic is at least 12 inches tall. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Precautions:

- **Garlic Response to Preemergence Applications of GoalTender:** Following a preemergence application of GoalTender, a chlorotic band around some of the leaves may be observed after the first irrigation (or rainfall) following garlic emergence.
- **Garlic Response to Post-direct Applications of GoalTender:** Post-direct applications may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms will be more severe if applications are made during cool, wet, overcast, or foggy weather. Garlic will typically outgrow these conditions. A delay in crop development, maturity, reduced yields, or quality may result

Transplanted Garlic: Postemergence Application Immediately after Planting		
Weed Control	**Rate (per/acre)**	**Specific Use Directions**
Preemergence Postemergence	up to 1 pt	**All States Except Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Transplanted garlic is most tolerant of a postemergence application immediately after transplanting. An application of up to 1 pint per acre may be made within two days after transplanting. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. If less than 1 pint per acre is applied, a second application can be made two weeks or more after transplanting. Do not exceed the maximum use rate of 1 pint per acre of GoalTender per season as a result of multiple applications.
Preemergence Postemergence	1 - 2 fl oz	**Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Multiple treatments at 1 to 2 fl oz per acre may be applied up to a maximum of 1 pint (16 fl oz) per acre per use season. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area.

Key Weeds Controlled:

canarygrass (annual)	puncturevine
eveningprimrose, cutleaf	purslane, common †
groundsel, common	rocket, London
mallow, little (malva)	sage, lanceleaf
nightshade, black	shepherdspurse †
pigweed, prostrate †	sowthistle, annual
pigweed, redroot †	

† Key weeds controlled at specified rates in Northeastern States.

Garlic - Crop-Specific Precaution (Postemergence Application):

- Postemergence applications of GoalTender may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms may be more severe if garlic emerged under cool, wet, overcast, or foggy weather. These conditions are temporary and should not affect the vigor or development of garlic plants.

Crop-Specific Restrictions (Applicable to All Methods of Application):

- In all states **except** Northeastern states, do not apply until **direct seeded** garlic plants have two fully developed true leaves. In the Northeastern states, do not apply until direct seeded garlic plants

Crop-Specific Restrictions (Applicable to All Methods of Application):
have three fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury. • Do not apply more than a total of 1 pint per acre of GoalTender per use season as a result of multiple applications. • Do not apply within 60 days of harvest. • In direct seeded garlic (except in California), do not apply GoalTender as a preemergence treatment. • Use only on dry bulb garlic. • Do not apply to garlic grown for seed. • For weed control in garlic, do not mix GoalTender with oils, surfactants, liquid fertilizers or pesticides except as specified on approved Adaura, LLC Supplemental Labeling. • Do not apply to garlic plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

Guava (Bearing and Non-Bearing

(For Use Only in Hawaii)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 - 4	**Preemergence or Postemergence:** In established guava plantings, apply preemergence or postemergence to weeds. Increase the spray volume to ensure adequate coverage in high densities of emerged weeds or heavy trash. Minimize contact with guava plants by directing the spray to the soil surface. Spray shields are suggested to minimize spray contact in young plantings. For broader spectrum postemergence control of grass and broadleaf weeds, GoalTender may be applied in tank mix combination with paraquat (Gramoxone) or glyphosate. Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products.
Postemergence	1 - 4	
Precautions: • Prevent direct spray or drift from contacting green stems, fruit or foliage, as injury may result. • Alone or in tank mix combination, GoalTender should be applied to only healthy growing trees. • Application of GoalTender should be made only after new foliage growth has hardened off.		
Crop-Specific Restrictions: • Do not apply more than 4 pints per acre of GoalTender in a single application or more than 8 pints per season. • Do not apply GoalTender within 1 day of harvest.		

Key Weeds Controlled:

Preemergence	Postemergence
ageratum buttonweed crotalaria purslane, common spurge, garden	purslane, common spurge, garden

Horseradish

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1	Apply GoalTender after the horseradish roots have been planted but prior to emergence of new horseradish leaves. Emerged leaves that receive direct or indirect spray (drift) contact will be injured. If necessary, cultivate before application to destroy germinated weeds.
Precautions: • Do not apply GoalTender to horseradish plantings that have been weakened or stressed due to unfavorable temperature conditions, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.		
Crop-Specific Restrictions: • Do not apply more than 1 pint of GoalTender per acre per crop.		

Key Weeds Controlled:

lambsquarters, common pigweed, redroot purslane, common	shepherdspurse smartweed, pennsylvania

Jojoba

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 3	Initial application may be made when jojoba plants have reached a height of 6 inches or more. Use sufficient spray volume to ensure thorough coverage of dense weed growth. Sprays should be directed to the base of jojoba plants to avoid possible phytotoxicity to foliage. Spray shields are suggested for use in young plantings. Use higher rate in rate range for extended residual preemergence weed control. Make follow-up applications as necessary to maintain weed control. For early postemergence control of susceptible seedling weeds (less than 8 inches tall) apply GoalTender at the rate of 2 pints per acre. GoalTender may be applied at the rate of 3 pints per acre for postemergence control of weeds up to 12 inches tall. For optimum residual control, apply during the fall or winter months. Control may be unsatisfactory for weeds greater than 12 inches tall.
Precautions: • Avoid direct spray or drift contact with jojoba flowers or buds as severe injury may result. • Over-the-top applications may cause burning, crinkling or bronzing of jojoba foliage, particularly to the youngest leaves, flowers, or buds present at the time of application.		
Crop-Specific Restrictions: • Do not apply more than 3 pints per acre per year.		

Key Weeds Controlled:

Preemergence	Postemergence
burclover	fiddleneck, coast
fiddleneck, coast	filaree, broadleaf ††
filaree, broadleaf	filaree, redstem ††
filaree, redstem	filaree, whitestem ††
filaree, whitestem	groundsel, common †
groundsel, common	henbit
henbit	mallow, little (malva,
knotweed, prostrate	cheeseweed)
lambsquarters, common	minerslettuce
lettuce, prickly	nettle, burning
mallow, little (malva,	pigweed, redroot †
cheeseweed)	redmaids
pigweed, redroot	shepherdspurse
purslane, common	sowthistle, annual
redmaids	
rocket, London	
shepherdspurse	
sowthistle, annual	

† Highest rate may be required for acceptable postemergence control.

†† GoalTender at the 3-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

Mint (Spearmint and Peppermint)

Mint (Spearmint and Peppermint) Grown on Mineral Soils		
Weed Control	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence Postemergence	2 - 3	**Oregon and Washington (East of Cascades), California, Montana, Idaho, Nevada, South Dakota and Utah:** Apply from December through March when mint is dormant. When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches. Late winter applications will provide maximum activity on summer weeds, but summer grass control may be inconsistent. For best results, fall-plowed fields should be harrowed to provide a smooth surface for application. In furrow-irrigated fields, corrugating must be done prior to application. Corrugating or harrowing will result in disturbance of treated soil or movement of untreated soil into treated areas, resulting in poor weed control.
Preemergence	1 – 1.5	**Peppermint (Western Oregon Willamette Valley):** Apply GoalTender from November through February to dormant peppermint only. Treatments in January or February generally provide better residual preemergence control of annual broadleaf weeds. Full season weed control should not be expected from this treatment.
Precautions: • Application must be made prior to emergence of new spring growth or severe crop injury may result. • **In the Willamette valley, do not apply GoalTender to mint that has been plowed.** • Apply GoalTender only to healthy stands of spearmint and peppermint. Do not apply to spearmint or peppermint weakened by disease, drought, flooding, excessive fertilizer, soil salts, previously applied pesticides, nematodes, insects, or winter injury, as severe injury may result.		
Crop-Specific Restrictions: • Do not make more than one application of GoalTender per season.		

Key Weeds Controlled:

bedstraw, catchweed	† oats, wild
† bluegrass, annual	orach, red
flixweed	pepperweed, yellowflower
groundsel, common	pigweed, redroot
lambsquarters, common	† ryegrass, Italian
lettuce, prickly (china lettuce)	shepherdspurse
mustard, blue (purple mustard)	sowthistle, annual
mustard, tumble (Jim hill mustard)	tansymustard
nightshade, hairy	thistle, Russian

† Control of annual grasses is best obtained when GoalTender is applied prior to emergence. Postemergence control of winter annual grasses is generally unsatisfactory if applications are made after the 1 to 2-leaf stage.

Mint (Spearmint and Peppermint) Grown on Muck Soils): For Use Only on Mint Grown in Indiana, Michigan, Montana, North Dakota, South Dakota, and Wisconsin		
Weed Control	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence Postemergence	2 - 3	**Note:** Use directions in this section apply only to spearmint and peppermint grown on muck soils (organic matter content of 20% or greater). When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches.
Precautions: • Application must be made prior to emergence of new spring growth or severe crop injury may result. • To avoid excessive crop injury, do not apply within 4 days of planting (sprigging) spearmint or peppermint. • Apply GoalTender only to healthy spearmint or peppermint. Do not apply to spearmint or peppermint that has been weakened by disease, nematodes, soil insects, or winter injury, as severe injury may result.		
Crop-Specific Restrictions: • Do not make more than one application of GoalTender per season.		

Key Weeds Controlled

Knotweed, prostrate
pigweed, redroot
purslane, common

Non-Crop Use

(Non-Food-Producing, Non-Cultivated Agricultural or Non-Agricultural Areas, such as Highway and Utility Rights-of-Way, Industrial Sites, Tank Farms, Storage Areas, Airports, Fencerows, and Farmsteads)

Weed Control	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence	2.5 - 4	**Preemergence:** Use higher rate in rate range for longer residual control. **Postemergence:** Use the lower rate in the rate range for control of susceptible weeds in the early postemergence stage, less than 4 inches tall. Use the higher rate for weeds up to 12 inches tall. Application to weeds beyond the 4-inch stage may result in partial control.
Postemergence	1 - 4	
Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. • **Preemergence:** For broader-spectrum residual preemergence weed control, GoalTender may be applied in tank mix combination diuron (Karmex) or simazine. • **Postemergence:** For additional postemergence control of susceptible grass and broadleaf weeds, GoalTender may be applied in tank mix combination with paraquat (Gramoxone) or glyphosate.		
Site-Specific Restrictions: • Do not feed or allow animals to graze on any areas treated with GoalTender. • Do not apply more than 4 pints per acre in a single application.		

Key Weeds Controlled:

Preemergence	Postemergence
burclover	cheeseweed (malva)
cheeseweed (malva)	fiddleneck, coast
fiddleneck, coast	filaree, broadleaf
filaree, broadleaf	filaree, redstem
filaree, redstem	groundsel, common
groundsel, common	henbit
henbit	minerslettuce
knotweed, prostrate	nettle, burning
lambsquarters, common	pigweed, redroot
lettuce, prickly	purslane, common
pigweed, redroot	redmaids
purslane, common	shepherdspurse
redmaids	sowthistle, annual
rocket, London	
shepherdspurse	
sowthistle, annual	

Onions

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

For optimum preemergence weed control, the soil surface should be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct Seeded Onions: Postemergence Application		
Weed Control	**Rate (per acre)**	**Specific Use Directions**
Postemergence	1 - 2 fl oz	**Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Apply GoalTender at 1 to 2 fl oz per acre to direct seeded onions that have at least 3 fully developed true leaves using ground equipment. Multiple treatments at 1 to 2 fl oz per acre may be applied up to a maximum of 1 pint (16 fl oz) per acre per use season. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing.
Postemergence	0.25 – 0.5 pt	**Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington:** Apply GoalTender at 0.25 to 0.5 pt per acre to direct seeded onions that have at least 2 fully developed true leaves using ground equipment. Multiple treatments at 0.25 to 0.5 pt per acre may be applied up to a maximum of 1.25 pints per acre per use season. For

		optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing.
Postemergence	0.25 pt	**All other states:** Apply GoalTender at 0.25 pt per acre to direct seeded onions that have at least 2 fully developed true leaves, using ground equipment. Multiple treatments at 0.25 pt per acre may be applied up to a maximum of 1 pint per acre per use season. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4 leaf stage and actively growing.
Postemergence	(see above)	**Sprinkler Irrigation - all except northeastern states (center pivot, portable lateral or solid set):** Apply GoalTender at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Transplanted Onions: Application Immediately before Planting		
Weed Control	**Rate (per/acre)**	**Specific Use Directions**
Preemergence Postemergence	0.5 - 1 pt	**pre-transplant application (not for use in northeastern states or western states:** GoalTender may be applied as a broadcast or band application after completion of tillage operations, but before transplanting of onion plants. Transplanting should be accomplished with a minimum of soil disturbance. For optimum weed control, soil surfaces should be left undisturbed after transplanting for the period for which weed control is desired. However, timely cultivation after weed emergence will assist in weed control. If less than 1 pt per acre was applied as a pre-transplant application, postemergence applications may be made as instructed for seeded onions. Do not exceed the maximum use rate of 1 pt per acre per use season as a result of multiple applications.

Transplanted Onions: Application Immediately after Planting		
Application Timing for Target Weeds	**Rate (per/acre)**	**Specific Use Directions**
Preemergence	up to 1 pt	**All states except northeastern states:** transplanted onions are most tolerant of a postemergence application immediately after transplanting. An application of up to 1 pint per acre may be made within two days after transplanting. If less than 1 pint per acre is applied, a second application can be made two weeks or more after transplanting. Do not exceed the maximum use rate of 1 pint per acre of GoalTender per season as a result of multiple applications.
Preemergence	1 - 2 fl oz	**Northeastern states including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Multiple treatments at 1 to 3 fl oz per acre may be applied up to a maximum of 1 pint (16 fl oz) per acre per use season.

Onions - Use Precautions (applicable to all areas and methods of application):

- GoalTender can cause necrotic lesions, twisting, pigtailing or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.
- Do not apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

Onions - Crop-Specific Restrictions (applicable to all areas and methods of application):

- In all states **except** Northeastern states, do not apply until **direct seeded** onion plants have at least two fully developed true leaves. In the Northeastern states, do not apply until direct seeded onion plants have at least three fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
- Do not apply more than a total of 1 pint per acre of GoalTender per use season as a result of multiple applications.
- Do not apply within 45 days of harvest.
- Do not apply GoalTender as a preemergence treatment to direct seeded onions.
- Use only on dry bulb onions.
- Do not apply to onions grown for seed, except as instructed in separate use directions.
- Tank mixtures of GoalTender herbicide with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in enhanced crop response/injury and are the responsibility of the user.

Key Weeds Controlled:

Postemergence
canarygrass (annual)
eveningprimrose, cutleaf [(a)]
groundsel, common
mallow, little (malva)
nightshade, black
pigweed, prostrate [(b)]
pigweed, redroot [(a, b)]
puncturevine
purslane, common [(a, b)]
rocket, London
sage, lanceleaf
shepherdspurse [(b)]
sowthistle, annual

[a] Weeds controlled when applied as a pre-transplant application. In addition, GoalTender at the rate of 0.5 to 1 pint per acre will provide control/suppression of carpetweed, Pennsylvania smartweed, galinsoga, common lambsquarters, and wild mustard. Applications of GoalTender to muck soils may result in partial control or suppression of the weeds listed.

[b] Specific weeds controlled at rates specified for use in northeastern states (see DOSAGE section).

Onions Grown for Seed

Agricultural Use Requirements: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Weed Control	Rate (per/acre)	Specific Use Directions
Preemergence	1 fl oz	**Northeastern States including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont:** Multiple treatments at 1 fl oz per acre may be applied up to a maximum of 1 pint (16 fl oz) per acre per use season. Prior to initial treatment, seeded onions must have *at least four (4) true leaves*. Multiple treatments at the aforementioned rate may be applied.
Preemergence	up to 0.25 pt	**All other States:** Apply GoalTender at up to 0.25 pt per acre to seeded onions that have *at least three (3) true leaves.* Multiple treatments at 0.25 pt per acre may be applied up to a maximum of 1 pint per acre per use season. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. **Sprinkler Irrigation - Portable Lateral or Solid Set:** Apply GoalTender at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Use Precautions:

- **Notice:** Some varieties or inbred lines of onions may be more susceptible to GoalTender. Care should be taken to insure that the particular onion variety or line being grown is tolerant to GoalTender. It is suggested that all onion varieties or lines be tested in limited areas to ensure an adequate level of crop tolerance prior to an application for postemergence weed control.
- GoalTender can cause necrotic lesions, twisting, pigtailing or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.
- Do not apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.

Crop-Specific Restrictions:

- In all states, do not apply GoalTender until the onions have reached the minimum leaf stage specified. Application prior to the specified stage of development may result in serious injury
- Do not apply more than a total of 1 pint per acre of GoalTender during one use season.
- Do not apply within 60 days of harvest.
- For seeded onions, do not apply GoalTender with oils, surfactants, liquid fertilizers or other pesticides except as specified in approved Adaura, LLC Supplemental Labeling.

Key Weeds Controlled:

Postemergence
canarygrass (annual)
eveningprimrose, cutleaf
groundsel, common
mallow, little (malva)
nightshade, black
pigweed, prostrate †
pigweed, redroot †
puncturevine
purslane, common †
rocket, London
sage, lanceleaf
shepherdspurse
sowthistle, annual

† Specific weeds controlled at rates specified for use in northeastern states (see DOSAGE section).

Papaya

(For Use Only in Hawaii)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2	The initial application should occur no sooner than 4 months after transplanting or 6 months after direct seeding, and after the papaya has reached a minimum height of 4 feet. Applications may be repeated at approximate 4-month intervals. Apply preemergence or postemergence to weeds. Increase the spray volume to assure adequate coverage of dense growth of emerged weeds. GoalTender must be applied as a directed spray to the orchard floor beneath the papaya plants. Accurate, uniform placement of GoalTender is essential for effective weed control and to minimize crop injury. GoalTender must be applied using rigid precision ground sprayer equipment. Postemergence applications may be made up to the 4 leaf stage of weed growth.
Precautions: • Do not allow the herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result. • Do not use GoalTender on papaya plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.		
Crop-Specific Restrictions: • Do not apply more than 2 pints of GoalTender per broadcast acre in a single directed spray or more than 6 pints per broadcast acre per year as a result of multiple applications. • Do not apply GoalTender within 1 day of harvest.		

Key Weeds Controlled:

amaranth, spiny
purslane, common
spurge, garden

Soybeans

(Not for Use in California)

Soybeans - Early Preplant Application in Conservation Tillage Systems		
Weed Control	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence	0.75 – 1.5	**Early Preplant Application:** Surface apply GoalTender to the stale seedbed approximately 14 days before planting conservation tillage soybeans for postemergence and preemergence residual broadleaf control. Use a spray volume of 20 or more gallons per acre and increase the spray volume if growth of existing weeds is dense. GoalTender at 1 to 1.5 pints provides early season suppression of annual grasses, but should not be relied upon as a basic grass herbicide. A planned program utilizing herbicides registered for early preplant, preemergence or postemergence grass control in soybeans is specified. Use of ridge or slot planter or a similar planting implement that causes minimal soil disturbance is specified. Movement or redistribution of surface soil will reduce herbicidal effectiveness.

Soybeans: No-Till (Double-Crop)		
Application Timing for Target Weeds	**Rate (pt/acre)**	**Specific Use Directions**
Preemergence Postemergence	0.25 - 1	**Preemergence Application to Soybeans:** Applied preemergence, GoalTender provides postemergence and residual preemergence control of susceptible broadleaf weeds. **Apply GoalTender within one day after planting. Later applications may result in severe crop injury.** Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense.
Tank Mixing: For enhanced postemergence control of existing grass and broadleaf weeds, GoalTender may be tank mixed with paraquat (Gramoxone) or glyphosate. For extended residual control of annual grasses no-till soybeans, GoalTender may also be tank mixed with a residual grass herbicide such as Bronco Herbicide, Dual Magnum Herbicide, or Lasso Herbicide.		
Postemergence	0.5	**Postemergence Directed Application:** GoalTender may be applied as a post-directed application. Optimum control is achieved when GoalTender is applied to seedling weeds not exceeding 4 true leaves (not counting cotyledon leaves) and actively growing. Use of an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints per 100 gallons of spray is specified whenever postemergence weed control is desired. **For postemergence application, Soybeans must be a minimum 8 inches tall.** Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. Do not use hollow cone nozzles.

Soybeans: Grown Under Conventional Tillage Systems

Application Timing for Target Weeds	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 0.75	**Preemergence Application to Soybeans:** GoalTender provides preemergence control of susceptible broadleaf weeds. **Apply GoalTender within one day after planting. Later applications may result in severe crop injury.** Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense. The 0.75 pint per acre rate will assist in early season annual grass control but should not be relied upon as a basic grass herbicide. GoalTender may also be applied as a preemergence application following a preplant incorporated grass herbicide treatment

Preemergence Tank Mixes (To Control Additional Grass and Broadleaf Weeds): Apply preemergence tank mixes of GoalTender within one day after planting. Later applications may result in severe crop injury.

- GoalTender at 0.3 to 0.75 pints per acre may be applied preemergence to soybeans in tank mix with Dual Magnum Herbicide or Lasso Herbicide. GoalTender may be applied alone as a preemergence application following a preplant incorporated grass herbicide application or as a tank mix in a preemergence application with Dual Magnum, or Lasso herbicides. Refer to the label of tank mix product for additional weeds controlled.
- GoalTender at 0.3 to 0.4 pints per acre may be applied preemergence to soybeans in tank mix with 1 to 1.67 pints of Command 6EC herbicide. Refer to the label for Command 6EC for additional weeds controlled.

Postemergence	0.5	**Postemergence Directed Sprays:** GoalTender may be applied as a post-directed application at 0.5 pint per acre. Optimum control is achieved when weeds not exceed 4 true leaves and are actively growing (do not count cotyledon leaves). Use of an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints per 100 gallons of spray is specified whenever postemergence weed control is desired. **For postemergence application, Soybeans must be a minimum 8 inches tall.** Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. Do not use hollow cone nozzles.

Postemergence Tank Mixes: For broader spectrum control of broadleaf weeds, GoalTender may be applied in tank mix with Butoxone Herbicide or Butyrac 200 Herbicide. Use 0.5 pint of GoalTender with 1 pint of Butoxone or 0.7 to 0.9 pint of Butyrac 200 per acre. Refer to label of tank mix product for additional weeds controlled.

Precautions (All Methods and Timings to Soybeans):

- Soybeans are tolerant to preemergence and post-directed applications of GoalTender at specified rates, however, under certain conditions injury may occur. Heavy splashing rain shortly after crop emergence or cold, wet soil conditions during early growth stages can cause leaf cupping and crinkling. When injury occurs, it is generally limited to the first few leaves that develop after crop emergence. Soybeans recover from this injury and yields are not adversely affected. Soybeans accidentally sprayed during a post-directed application will exhibit necrotic spotting and injury to the soybean plant. Exercise care to avoid spray contact with the soybean leaves.

Crop-Specific Restrictions:

- **Tank Mixing:** Read and observe all label directions before using. Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive limitations must apply.
- Do not make more than two applications of GoalTender per growing season.
- Do not apply more than 1 pint (0.5 lbs active) of GoalTender per acre during one growing season as a result of preemergence application in no-till (double-crop) or conventional till soybeans, or post-directed in conventional till soybeans. If early preplant application is made, do not apply more than 1.5 pints (0.75 lb active) of GoalTender per acre during one growing season.
- Do not apply a post-directed application of GoalTender to soybeans after the initial appearance of blooms.
- Maximum total application rate per year is 1.5 lbs ai/A

Key Weeds Controlled (GoalTender Alone):

Preemergence	Postemergence
groundcherry, cutleaf †	cocklebur, common
jimsonweed	croton, tropic
lambsquarters, common	groundcherry, cutleaf
nightshade, American black †	groundcherry, Wright
nightshade, black †	jimsonweed
pigweed, redroot	lambsquarters, common
poinsettia, wild	morningglory, annual (up to 6 leaf)
shepherdspurse	mustard, wild
sida, prickly (teaweed)	nightshade, American black
smartweed, Pennsylvania	nightshade, black
sowthistle, common †	nightshade, hairy
velvetleaf	pigweed, redroot
	† poinsettia, wild
	purslane, common
	sesbania, hemp
	shepherdspurse
	sicklepod ††
	sida, prickly (teaweed) †
	smartweed, Pennsylvania
	velvetleaf

† Multiple applications may be required for acceptable control.

†† Post-direct applications of GoalTender will kill or suppress seedlings not exceeding the one true leaf stage.

Taro

(For Use Only in Hawaii)

For use only to dryland taro grown in Hawaii. Dryland taro is defined as taro grown without irrigation, or by using irrigation practices that do not result in run-off, irrigation return flow, or other loss of irrigation water from the production area. If irrigation is used, the water applied shall not exceed the field capacity of the soil.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1	**Preemergence to Taro and Weeds:** A single application of GoalTender at the rate of 2 pints per acre may be applied within 1 week after transplanting but prior to emergence of taro plants.
Postemergence	0.5	**Postemergence to Taro and Weeds:** GoalTender may be applied as a post-directed or band application at the rate of 1 pint per acre. Effective control of succulent weed seedlings in the 2-to 3-leaf stage can usually be obtained. Applications to weeds beyond the 3-leaf stage may result in partial control.

Precautions:

- Accurate, uniform placement of GoalTender is essential for effective weed control and to minimize crop injury. Taro foliage receiving accidental spray or drift will be injured. GoalTender must be applied using rigid precision ground sprayer equipment.
- Occasionally, after the use of GoalTender, spotting, crinkling or flecking may appear on the leaves of the taro. Leaves that receive direct or indirect (drift) spray contact will be injured.
- Do not use GoalTender on taro plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

Crop-Specific Restrictions:

- Do not apply more than 1 pint of GoalTender per broadcast acre as a single preemergence application.
- Do not apply more than 0.5 pint of GoalTender per acre in a single post-direct spray or more than 1 pint per acre per season as a result of multiple post-directed applications.
- Do not apply more than 2 pints of GoalTender per acre per season as a result of preemergence and post-direct applications.
- Do not apply GoalTender within 6 months of harvest of taro (corms, leaves).

Key Weeds Controlled:

amaranth, spiny
purslane, common
spurge, garden

Treefruit / Nut / Vine Crops (Dormant Application)

Almond, Apple, Apricot, Avocado, Beechnut, Brazil Nut, Butternut, Cashew, Cherry, Chestnut, Chinquapin, Crab Apple, Date, Feijoa, Fig, Filbert, Grapes, Hickory Nut, Kiwi, Loquat, Macadamia Nut, Mayhaws, Nectarine, Olives, Peach, Pear, Pecan, Persimmon, Pistachio, Plum, Pomegranates, Prune, Quince, and Walnut

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence (broadcast application) (banded application)	2.5 – 3 2.5 - 4	Apply GoalTender a minimum of 20 gallons of water per acre. Use higher spray volumes to ensure thorough coverage in high densities of emerged weeds or heavy trash. Sprays should be directed to the soil and the base of dormant trees or vines. **In California,** GoalTender may be applied as an over-the-top or directed spray to dormant nonbearing grape plantings. The use of a low-pressure sprayer is suggested. Do not apply over-the-top to grape plantings that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, injury from previously applied pesticides, or injury due to insects, nematodes, or diseases, as severe crop injury may result.
Postemergence (broadcast application) (banded application)	1 – 3 1 - 4	Apply in a spray volume of 40 or more gallons per acre. For optimum control, apply when weeds are at seedling stage of growth. The lower rate in the rate range (1 pint per acre) is specified for the control of susceptible seedling weeds in the early postemergence stage up to the 4-leaf stage. Higher rates (up to 3 pints per acre) may be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.

Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. See labels of tank mix partners to determine suitability and use rates for various crops.

- **Postemergence:** For broader spectrum postemergence control of listed grass and broadleaf weeds, GoalTender may be applied in tank mix with paraquat (Gramoxone) or glyphosate. These herbicides may also be added to preemergence tank mixes for enhanced control of existing weeds.
- **Preemergence:** For broad-spectrum preemergence control of susceptible grass and broadleaf weeds in listed treefruit, nut or vine plantings, GoalTender may be applied in tank mix with napropamide (Devrinol herbicide), diuron (Karmex herbicide), pronamide (Kerb® herbicide), simazine, norflurazon (Solicam herbicide) or oryzalin (Surflan herbicide).

Chemigation (All States): For dormant season application using sprinkler (low-volume (micro-sprinkler), drip (trickle), and flood (basin) irrigation systems, apply GoalTender at the specified rate per acre. Follow applicable directions in the Chemigation section of this label when making applications using irrigation systems.

Precautions:

- GoalTender or any of the combinations specified on this label should be applied to only healthy growing trees or vines.
- Avoid direct plant contact. Direct spray toward the base of tree or vines unless specific use recommendations allow over-the-top application.

Crop-Specific Restrictions:

- In all states, unless otherwise specified, do not apply GoalTender during the period between bud swell and completion of final harvest or when fruit/nuts are present. GoalTender may be applied upon completion of final harvest.

- **In Arizona and California, GoalTender may be applied during the period following completion of final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after these calendar dates, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.**
- For banded applications, up to 4 pints per acre of GoalTender per use season may be applied within the treated band. Do not apply more than a maximum of 3 pints per acre per use season on a broadcast basis.
- Do not apply to grapes or kiwi established less than 3 years unless vines are on a trellis wire a minimum of 3 feet above the soil surface.
- Do not apply to grapes or kiwi that are not staked or trellised unless vines are free standing.
- Maximum total application rate per year is 1.5 lbs ai/A

Key Weeds Controlled (Arizona and California):

Preemergence	Postemergence
burclover	cheeseweed (malva)
cheeseweed (malva)	fiddleneck, coast
fiddleneck, coast	filaree, broadleaf †
filaree, broadleaf	filaree, redstem †
filaree, redstem	filaree, whitestem †
filaree, whitestem	groundsel, common
groundsel, common	henbit
henbit	minerslettuce
knotweed, prostrate	nettle, burning
lambsquarters, common	pigweed, redroot
lettuce, prickly	redmaids
pigweed, redroot	shepherdspurse
purslane, common	sowthistle, annual
redmaids	
rocket, London	
shepherdspurse	
sowthistle, annual	

† GoalTender at the 3-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

Key Weeds Controlled (All Other States Except Arizona and California):

Preemergence	Postemergence
camphorweed	balsamapple
cudweed, narrowleaf	cocklebur, common
eveningprimrose, cutleaf †	cudweed, narrowleaf ††
groundcherry, cutleaf	eveningprimrose, cutleaf †††
jimsonweed	groundcherry, cutleaf
lambsquarters, common	groundcherry, Wright
nightshade, American black	jimsonweed
nightshade, black	lambsquarters, common
pepperweed, Virginia	morningglory, annual
pigweed, redroot	nightshade, American black
poinsettia, wild	nightshade, black
sida, prickly	pepperweed, Virginia
smartweed, Pennsylvania	pigweed, redroot
sowthistle, annual	poinsettia, wild
spurge, prostrate	purslane, common
spurge, spotted	

Preemergence	Postemergence
velvetleaf	sesbania, hemp shepherdspurse sida, prickly (teaweed) smartweed, pennsylvania sowthistle, annual velvetleaf

† Highest rate and/or multiple applications may be required for acceptable control.
†† Maximum 0.5-inch diameter
††† Highest rate and/or multiple applications may be required for acceptable control.

Grapes (Non-Dormant Application)

(California Only)

GoalTender may be applied as a directed spray or, for supplemental preemergence weed control, through low-volume sprinkler (micro-sprinkler) or drip irrigation systems for control or suppression of listed broadleaf weeds in non-dormant grapes (raisin and wine grapes only). GoalTender may also be applied to all grapes (raisin, table, and wine) as a dormant season application. Refer to Treefruit/Nut/Vine Crops (Dormant Application) section above for use directions for dormant season application to grapes.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1	GoalTender may be applied preemergence or postemergence to weeds either as a directed spray in a minimum spray volume of 20 gallons per acre or through low-volume sprinkler (micro-sprinkler) or drip irrigation systems. Repeat applications may be required. Applications may be made from completion of bloom up to 14 days before to harvest. When applied as a postemergence directed spray, add 1 quart 80% active nonionic surfactant cleared for application to growing crops per 100 gallons of spray. Sprays should be directed to the soil and the base of vines.
Postemergence	0.5 - 1	

Tank Mixing:

- When applied as a directed postemergence spray using ground equipment, GoalTender may be applied in tank mix with paraquat (Gramoxone) or glyphosate in a minimum spray volume of 10 gallons per acre. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.

Chemigation: Follow chemigation instructions in Product Information section.

- **Low Volume Sprinkler (Micro sprinkler) and Drip (Trickle) Irrigation:** Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the canopy. Meter GoalTender at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of GoalTender through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.

Precautions:

- **Crop Tolerance:** The use of GoalTender may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift, soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Grape leaves that are immature or expanding at the time of contact with GoalTender are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flicks) on the fruit.
- GoalTender is phytotoxic to plant foliage. Avoid drift to all other crops and nontarget areas. Do not apply when weather conditions favor drift.

Crop-Specific Use Restrictions:

- The total amount of GoalTender applied during one season (from completion of final harvest through dormancy to non-dormant use covered by this section) cannot exceed 3 pints per acre as a result of multiple applications in any given area (broadcast, banded, or within the wetted area of the low-volume sprinkler or drip irrigation system).
- Do not apply within 14 days of harvest.
- Do not initiate application of GoalTender in non-dormant grapes until the completion of the bloom period.
- Do not apply to grapes established less than 3 years unless vines are either on a trellis wire a minimum of 3 feet above the soil surface, or protected by grow tubes.
- GoalTender should be applied only by ground application equipment of through low-volume sprinkler (micro-sprinkler) or drip (trickle) irrigation systems.
- Apply GoalTender as a non-dormant application to wine grapes or raisin grapes only.

Key Weeds Controlled or Suppressed:

Preemergence	Postemergence
burclover	cheeseweed (malva)
cheeseweed, malva	fiddleneck, coast
fiddleneck, coast	groundsel, common
groundsel, common	henbit
henbit	minerslettuce
knotweed, prostrate	morningglory species, annual
lambsquarters, common	mustard, black
minerslettuce	nettle, burning
mustard, black	nightshade, black
nettle, burning	pigweed, redroot
nightshade, black	purslane, common
pigweed, redroot	redmaids
purslane, common	rocket, London
redmaids	sowthistle, annual
rocket, London	
sowthistle, annual	

Sucker Control in Non-Dormant Grapes

(Washington and Oregon Only)
(Grapes for Wine and Processing Only)

Application Timing for Sucker Control	Rate (pt/acre)	Specific Use Directions
Grape suckers less than 12 inches in length.	0.5 - 1	Apply GoalTender in a three-foot band directed towards to newly emerging suckers at the base of the grapevine. The highest rate and/or a second application may be required to achieve an acceptable level of control/suppression of grape suckers. Avoid spray contact on flowers, grape clusters, or fruit. Use mounted nozzles to deliver the spray solution. Thorough spray coverage of sucker growth is essential for optimal activity. Use a spray volume of 50 or more gallons per acre (broadcast basis).
Tank Mixing: For enhanced postemergence sucker activity, a tank mixture of GoalTender with either glufosinate (Rely Herbicide) or paraquat (Gramoxone) can be used. Apply at the specified rates and growth stages in a manner describe on the respective labels. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.		
Precautions: • The use of GoalTender may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift or soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Leaves that are immature or expanding at the time of contact with GoalTender are the most susceptible to injury. Grape fruit may exhibit some small blemishes (spots or flecks) on the fruit.		
Crop-Specific Restrictions: • The total amount of GoalTender applied during one crop year (dormant and non-dormant) cannot exceed 3 pints per acre as a result of multiple applications in any give area (broadcast or banded). • GoalTender should be applied only by ground application equipment. • Apply GoalTender as a non-dormant application for sucker control only to wine or processed grapes. • Do not apply GoalTender within 60 days of harvest.		

Pistachios, Walnuts, Almonds (California and Arizona Only)

(Non-Dormant Application)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 - 3	**Preemergence:** For residual weed control of listed weeds.
Postemergence	0.5 - 1	**Postemergence (Suppression):** Apply to seedling weeds less than 4 inches in height. Repeat applications may be required.
	1 - 3	**Postemergence (Cleanup):** Contact (postemergence) control for cleanup sprays and preharvest applications. Apply to seedling weeds less than 4 inches in height. Applications to weed seedlings beyond the 4-inch stage may result in partial control.
Tank Mixing: For broader spectrum grass and broadleaf weed control in tree row middles, GoalTender may be tank mixed with either paraquat (Gramoxone) or glyphosate. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.		

Chemigation: Follow chemigation instructions in Product Information section.

Flood (Basin) Irrigation: For flood (basin) irrigation systems, meter continuously into the water during the entire irrigation period. Best weed control results are obtained when a uniform distribution and flow of irrigation water is maintained over level land. Irrigation water treated with GoalTender must be contained on the treated area until the water is absorbed by the soil.

Low Volume Sprinkler (Micro sprinkler) and Drip (Trickle) Irrigation: Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the tree canopy. Applications should be made prior to weed emergence; otherwise postemergence activity may be inconsistent due to uneven coverage. Meter GoalTender at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of GoalTender through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.

Precautions:

- Direct spray toward the base of trees. Avoid direct contact with foliage or nuts.
- GoalTender should be applied only to healthy growing trees

Crop-Specific Use Restrictions:

- When applied as a non-dormant treatment, GoalTender can only be applied to pistachio plantings between May and 7 days prior to harvest.
- When applied as a non-dormant treatment, GoalTender can only be applied to almond plantings between April 1 and September 30 and to walnut plantings between May 1 and September 30.
- Do not apply GoalTender within 7 days of harvest of pistachios.
- Do not apply GoalTender within 30 days of harvest of almonds.
- Do not apply GoalTender within 7 days of harvest of walnuts.
- Do not apply more than 3 pints of GoalTender per acre during the non-dormant season.
- Maximum total application rate per year is 1.5 lbs ai/A

Key Weeds Suppressed and/or Controlled

cheeseweed (malva)	morningglory species, annual
fiddleneck, coast	mustard, black
filaree, broadleaf	nettle, burning
filaree, redstem	pigweed, redroot
filaree, whitestem	purslane, common
groundsel, common	redmaids
henbit	rocket, London
minerslettuce	sowthistle, annual

Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

barnyardgrass	horseweed (marestail)
bluegrass, annual	rocket, London
chickweed, common	ryegrass, Italian

Windbreaks and Shelterbelts

(For Use Only in Minnesota, North Dakota, South Dakota and Wyoming)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 - 3	Apply GoalTender may be applied as a broadcast, banded or post-directed spray. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Pre-transplant applications must be made after completion of soil preparation but prior to transplanting. Transplanting should

		be completed with minimal soil disturbance. For optimum weed control results, treated soil surfaces should be left undisturbed during the time period for which weed control is desired. **Postemergence Weed Control:** For best results, apply before 4-leaf stage for broadleaf weeds or 2-leaf stage for grass weeds. **Conifers:** GoalTender can be applied pre-transplant, post-directed or postemergence (over-the-top) to conifers. Postemergence or post-directed applications should be applied prior to budbreak or after new growth foliage has hardened off and new terminal buds have formed. **Deciduous Hardwoods:** GoalTender has exhibited selectivity to many deciduous species when applied pre-transplant or as a post-directed spray prior to budbreak.

Precautions:

- **Important:** Some varieties or cultivars of conifers or deciduous species listed may be susceptible to GoalTender. Care should be taken to ensure that the particular variety to be sprayed with GoalTender is tolerant. For unfamiliar species, it is suggested that GoalTender be tested on a limited number of plants prior to large-scale application.
- Occasionally after the use of GoalTender, a spotting, crinkling or flecking may appear on the leaves of the deciduous species. Leaves that receive direct or indirect (drift) spray contact will be injured. Deciduous species typically rapidly outgrow these symptoms and develop normally.
- Application after budbreak may result in injury to deciduous species. If non-dormant application is required, apply only after foliage has fully expanded and hardened off. Avoid direct or indirect spray contact with the foliage by applying to the soil surface as a directed spray.
- Apply GoalTender only to healthy deciduous and/or conifer trees. Do not apply GoalTender to conifers or deciduous trees that have been weakened or under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.

Specific Use Restrictions for Shelterbelts:

- Do not apply more than 3 pints of GoalTender per acre in a single application or more than 9 pints per acre per year.

Key Broadleaf Weeds Controlled:

buckwheat, wild	mustard, wild
burclover	nettle, burning
carpetweed	nightshade, black
dock, curly	nightshade, hairy
groundcherry, cutleaf	oats, wild
groundcherry, Wright	orach, red
groundsel, common	pepperweed, yellow flower
henbit	pigweed, prostrate
jimsonweed	pigweed, redroot
knotweed, prostrate	purslane, common
kochia	rocket, London
ladysthumb	shepherdspurse †
lambsquarters, common	smartweed, Pennsylvania
lettuce, prickly	sowthistle, annual
mallow, little	tansymustard
mayweed	thistle, Russian (seedling)
mustard, blue	velvetleaf
mustard, tumble	

† The highest rate or multiple applications may be required for acceptable control.

Key Grasses Controlled:

barnyardgrass	foxtail, giant
bluegrass, annual	goosegrass
crabgrass, large	witchgrass

GoalTender may be applied to numerous conifer and deciduous species, including the following:

Conifer Species

Common Name	Scientific Name
douglas-fir	*Pseudotsuga menziesii*
fir	
grand	*Abies grandis*
fraser	*Abies fraseri*
noble	*Abies procera*
hemlock	
eastern hemlock	*Tsuga canadensis*
western hemlock	*Tsuga heterophylla*
pine	
Austrian	*Pinus nigra*
eastern white	*Pinus strobus*
jack	*Pinus banksiana*
Himalayan	*Pinus graffithii*
loblolly	*Pinus taeda*
lodgepole	*Pinus contorta*
longleaf	*Pinus palustris*
monterey	*Pinus radiata*
mugo	*Pinus mugo*
ponderosa	*Pinus ponderosa*
scotch	*Pinus sylvestris*
shortleaf	*Pinus echinata*
slash	*Pinus elliottii*
Virginia	*Pinus virginiana*
spruce	
blue	*Picea pungens*
dwarf Alberta	*Picea glauca conica*
Norway	*Picea abies*
Sitka	*Picea sitchensis*
Arborvitae	*Thuja occidentalis* *Thuja orientalis*
juniper	*Juniperus chinensis* *Juniperus horizontalis* *Juniperus procumbens* *Juniperus sabina* *Juniperus scopulorum*
red cedar	*Juniperus virginiana*
yew	*Taxus* spp.

Deciduous Hardwood Species

Common Name	Scientific Name
ash	*Fraxinus* spp.
crabapple	*Malus spp.*
eucalyptus	*Eucalyptus* spp.
lilac	*Syringa vulgaris*

maple, black	*Acer nigrum*
oak, northern red	*Quercus rubra*
olive, Russian	*Elaeagnus angustifolia*
poplar (cottonwood)	*Populus* spp.
sweetgum	*Liquidambar styraciflua*
sycamore	*Platanus occidentalis*
walnut, black	*Juglans nigra*

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

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

Inherent Risks of Use

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

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Adaura, LLC's election, one of the following:

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

Adaura, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Adaura, LLC is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Adaura, LLC be liable for consequential or incidental damages or losses.

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

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SAFETY DATA SHEET

EMERGENCY CALL: 1-877-325-1840

1. IDENTIFICATION

PRODUCT NAME: Goaltender
DESCRIPTION: Liquid Herbicide
EPA Reg. No.: 92894-3

COMPANY IDENTIFICATION:
Nutrichem USA, LLC
3050 Metro Drive, Suite 113
Bloomington, MN 5542

2. HAZARD IDENTIFICATION

WARNING

Suspected of causing cancer (H351)
May cause damage to organs through prolonged or repeated exposure (H373)
Very toxic to aquatic life with long lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards	Category
Carcinogenicity	2
Specific target organ toxicity -repeated exposure	2

Physical Hazards	Category
None	--

Environmental Hazards	Category
Hazardous to the aquatic environment – short-term (acute)	1
Hazardous to the aquatic environment – long-term (chronic)	1

HAZARDS NOT REQUIRING CLASSIFICATION

None

PRECAUTIONARY STATEMENTS

Obtain, read and follow all safety instructions before use. Do not breathe spray/mist. Wear protective gloves/protective clothing/eye protection/face protection (P203+P260+P280)

Get medical help if you feel unwell. (P319)

If exposed or concerned, get medical advice. (P318)

Avoid release to the environment not in accordance with the product label. Collect spillage. (P273+P391)

Store locked up. (P405)

Dispose of contents / container using instructions in the product label and in accordance with local / Federal regulations. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Oxyfluorfen	Benzene, 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)-	42874-03-3	41.0%
Propylene glycol		57-55-6	10.0%

4. FIRST AID MEASURES

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 day or night, for emergency treatment information.

5. FIREFIGHTING MEASURES

Flash Point: Not determined

Flammable Limits (LFL-UFL): Not determined

Fire and Explosion Hazards: Not determined

Extinguishing Medium: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers, foam, alcohol resistant foams (ATC type) are preferred, general purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

NFPA Ratings: Health – 1 / Flammability – 1 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Spill Cleanup: Dike spill using suitable absorbent or impervious materials such as sand or clay. Collect and contain contaminated absorbent and place in an appropriate container for disposal. Pump any free liquid into an appropriate closed container and decontaminate tools and equipment following cleanup. Collect washings for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin or clothing.

Storage: Keep from freezing. Store above 32°F

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Component	Regulation	Type of listing	Value/Notation
Oxyfluorfen	Dow IHG	TWA	0.2 mg/m^3
Propylene glycol	US WEEL	TWA	10 mg/m^3

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Engineering Controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: When handling, wear long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate) when mixing and loading, chemical-resistant apron when mixing and loading.

General: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and was PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	yellow to orange liquid
Odor:	characteristic
Melting/freezing point range:	not available
Boiling point/Boiling range:	not available
Flammability:	not available
Flammability limits (upper/lower):	not available
Flash point:	not available
Auto-ignition temperature:	none below 400°C
Decomposition temperature:	not available
pH:	6.5-7.5
Kinematic viscosity:	not available
Solubility:	not available
Partition coefficient	not available
Vapor pressure:	not available
Bulk density:	9.85-9.95 lb./gal
Relative vapor density:	1.19
Dynamic viscosity:	81.4 mPa.s at 40°C (104°F)
Particle characteristics:	no data available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Some components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with acids, amines, bases, halogens.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, toxic gases are released during decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (rat LD_{50}): 5,000 mg/kg

DERMAL TOXICITY (rat LD_{50}): > 5,000 mg/kg

INHALATION TOXICITY (rat LC_{50}): >0.39 mg/L (dust/mist) (4-hour)

Maximum attainable concentration. No deaths occurred at this concentration.

EYE IRRITATION: Essentially non irritating to eyes. Corneal injury is unlikely.

SKIN IRRITATION: Brief contact is essentially nonirritating to skin.

SKIN SENSITIZATION: Did not cause allergic skin reactions when tested in guinea pigs.

CARCINOGENICITY:

EPA: Category C: Possible human carcinogen (oxyfluorfen)
ACGIH: Not listed **NTP:** Not Listed
IARC: Not listed **OSHA:** Not Listed

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE): Evaluation of available data suggests that this material is not an STOT-SE toxicant.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED TOXICITY EXPOSURE): For the active ingredient(s): In animals, effects have been reported on the following organs: liver, spleen.

MUTAGENICITY: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

TERATOGENICITY: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

REPRODUCTIVE TOXICITY: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic invertebrates and wildlife.

Information presented below is from testing done with the active ingredient, oxyfluorfen:
Bluegill sunfish (96-hour LC_{50}): 0.2 mg/L
Fathead minnow (30-days NOAEC): 0.38 mg/L
Sheepshead minnow (96-hour LC_{50}): >0.11 mg/L; (34-day NOAEC): 0.00409
Water Flea (48-hour LC_{50}): 1.5 mg/L; (21-days NOAEC): 0.013
Algae (96-hour EC_{50}): 0.0029

AVIAN TOXICITY
Bobwhite Quail (LD_{50}): >2,150 mg/kg (body weight)
Bobwhite Quail (5-days LC_{50}): >5,000 mg/kg (diet)

HONEYBEE TOXICITY
Honeybee Acute contact (LD_{50}): >100 µg/bee
Honeybee Acute oral (LD_{50}): >109 µg/bee

ENVIRONMENTAL FATE
Does not bioaccumulate. Not persistent in soil or water. Relatively immobile in soil (K_{oc} > 5,000).

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. 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: Nonrefillable and refillable containers. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US-DOT:
Not regulated

IMDG:

Containers ≤ 1.3 gal. (5 L) in strong outer packaging:
Not regulated

Containers > 1.3 gal. (5 L) or containers not in strong outer packaging:
Shipped internationally by vessel: UN3082, Environmentally hazardous substance, liquid, N.O.S. (oxyfluorfen), 9, III, Marine Pollutant

IATA:
Shipped by air: UN3082, Environmentally hazardous substance, liquid, N.O.S. (oxyfluorfen), 9, III, Marine Pollutant

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

FIFRA –
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

> **PRECAUTIONARY STATEMENTS**
> **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**
> **CAUTION**
> Avoid contact with skin or clothing.
>
> **ENVIRONMENTAL HAZARDS**
> This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. See Directions for Use for additional restrictions. Do not contaminate water when disposing of equipment wash water or rinseate.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances
Not listed

SARA Title III – Section 311/312 Hazard Categories
Immediate (acute), Delayed (chronic)

SARA Title III – Section 312 Threshold Planning Quantity
Not listed

SARA Title III – Section 313 Reportable Ingredients
Oxyfluorfen (CAS No. 42874-03-3): 41.0%

CERCLA Reportable Quantity (RQ) –
Not listed

CALIFORNIA PROP 65 STATUS –
This product does not contain any chemical known to the State of California to cause cancer or other reproductive harm.

CANADA – This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

NUTRICHEM USA, LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

SDS Version: 2.0 Effective Date: 01/06/2023

Form Approved. OMB No. 2070-0182 Approval expires 5-31-15

United States Environmental Protection Agency
Office of Pesticide Programs, Registration Division (7505C)
Washington, DC 20460

Application for/Notification of State Registration of a Pesticide To Meet a Special Local Need

(Pursuant to section 24(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as Amended)

For State Use Only
Registration No. Assigned
Date Registration Issued

1. Name and Address of Applicant for Registration

Nutrichem USA, Inc.
No. 27 Life Science Park Road
Changping District
Bejing 102206, China

2. Product is (Check one)

- [X] EPA-Registered — EPA Registration Number: 92894-3
- [ ] New (not EPA-registered) — Attach EPA Form 8570-4, Confidential Statement of Formula for new products. — EPA Company Number: 92894

3. Active Ingredient(s) in Product

oxyfluorfen

4. Product Name

GoalTender

5. If this is a food/feed use, a tolerance or other residue clearance is required. Cite appropriate regulations in 40 CFR Part 180, 185, and/or 186. 40 CFR 180.381

6. Type of Registration (Give details in Item 13 or on a separate page, properly identified and attached to this form):

- [ ] a. To permit use of a new product.
- [X] b. To amend EPA registrations for one or more of the following purposes:
  - [ ] (1) To permit use on additional crops or animals.
  - [ ] (2) To permit use at additional sites.
  - [ ] (3) To permit use against additional pests.
  - [X] (4) To permit use of additional application techniques or equipment.
  - [ ] (5) To permit use at different application rates.
  - [ ] (6) Other (specify below)

7. Nature of Special Local Need (check one)

- [ ] There is no pesticide product registered by EPA for such use.
- [X] There is no EPA-registered pesticide product which, under the conditions of use within the State, would be as safe and/or as efficacious for such use within the terms and conditions of EPA registration.
- [ ] An appropriate EPA-registered pesticide product is not available.

8. If this registration is an amendment to an EPA-registered product, is it for a "new use" as defined in 40 CFR 152.3 ?

- [ ] Yes (discuss in Item 13 below)
- [X] No

9. Has an EPA Registration or Experimental Use Permit for this chemical ever been (check applicable box(es), if known):

- [ ] Sought
- [X] Issued
- [ ] Denied
- [ ] Cancelled
- [ ] Suspended
- [X] Registration
- [ ] Experimental Use Permit
- [ ] No Previous Permit Action

10. Has FIFRA section 24(c) registration for this use of the product ever, by another State, been (check appropriate box(es), if known):

- [X] Sought
- [X] Issued
- [ ] Denied
- [ ] Revoked

If any of the above are checked, list States in Item 13 below.

- [ ] No FIFRA section 24(c) Action

11. Endangered Species Act: (Give details in Item 13 or on a separate page, properly identified and attached to this form)

Identify the counties where this pesticide will be used. If Statewide, indicate "all." Provide a list of Federally protected endangered/threatened species which occur in the areas of proposed use. ALL

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

12. Indicate use status of Special Local Need, i.e., planned dates of use:

From: 01/01/2027 To: 12/31/2031.

Signature of Applicant or Authorized Representative

Maryann M Kellogg

Title

Agent

Telephone Number

253-853-7369

Date

October 7,2026

13. Comments (attach additional sheet, if needed)

10. AZ, CA, DE, MI, NJ, NY, PA, TX

11. Attached

Determination by State Agency

This registration is for a Special Local Need and is being issued in accordance with section 24(c) of FIFRA, as amended. To the best of our knowledge, the information above is correct, except as noted in "Comments" below or in attachments.

Name, Title, and Address of State Agency Official	Comments (by State Agency Only)	Received by EPA
Title		
Telephone Number / Date		

EPA Form 8570-25 (Rev. 5-12)

EPA COPY

Listed species believed to or known to occur in Maine

Source: US-FWS Environmental Conservation Online System (ECOS)
https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=ME&stateName=Maine&statusCategory=Listed
Date: 10/7/2026

Notes:
This report shows listed species or populations believed to or known to occur in ME
This list does not include experimental populations and similarity of appearance listings.
Click on the highlighted scientific names below to view a Species Profile.

11 Species Listings

Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Birds				
Charadrius melodus	Piping Plover	[Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as	5	Threatened
Sterna dougallii dougallii	Roseate tern	Northeast U.S. nesting population	5	Endangered
Calidris canutus rufa	rufa red knot	Wherever found	5	Threatened
Fishes				
Salmo salar	Atlantic salmon	Gulf of Maine DPS	5	Endangered
Flowering Plants				
Platanthera leucophaea	Eastern prairie fringed orchid		3	Threatened
Pedicularis furbishiae	Furbish lousewort		5	Threatened
Isotria medeoloides	Small whorled pogonia		5	Threatened
Insects				
Bombus affinis	Rusty patched bumble bee	Wherever found	3	Endangered
Mammals				
Lynx canadensis	Canada Lynx	Wherever Found in Contiguous U.S.	6	Threatened
Myotis septentrionalis	Northern Long-Eared Bat	Wherever found	3	Endangered
Reptiles				
Eretmochelys imbricata	Hawksbill sea turtle	Wherever found	4	Endangered