

66222-107

09/22/2006

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

SEP 22 2006

Ms. Jane Rothwell  
Registration Specialist  
Makhteshim Agan of North America, Inc.  
4514 Falls of Neuse Rd., Suite 300  
Raleigh, NC 27609

Dear Ms. Rothwell:

SUBJECT: Chief™ 3SC Herbicide  
EPA Registration No. 66222-107  
Application and Letter Dated August 28, 2006, Request  
To Amend Registration by the Addition of Supplemental  
Labeling for Use on Non-dormant Grapes, Pistachios,  
Walnuts, and Almonds

Your application to amend the registration of the subject pesticide product by adding supplemental labeling for use in the culture of non-dormant grapes, pistachios, walnuts and almonds has been reviewed and found acceptable under the federal Insecticide, Fungicide and Rodenticide Act, as amended (FIFRA), provided that you:

1. On page 1, "Dosage and Application Timing" revise the first sentence to read: "Chief 3SC can be applied ... ..up to 14 days prior to harvest."
2. On page 2, revise the claim "can be used." to "may be used."; and, the claim: "Chief 3SC should be directed to the soil and the base of vines." to read: "Apply Chief 3 SC uniformly to the soil at 1 - 2 pints per acre.", or delete the sentence.
3. On page 3, clarify the directions to apply to "susceptible weed seedling" and "susceptible weed species" to indicate the weeds "listed below".
4. On page 4, delete the "Specific Use Restriction": "Direct spray toward the base of tree." You may use: "Apply as a directed post emergence spray using ground equipment".

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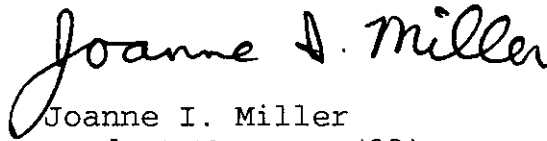
5. Delete the claim repeated in this label that reads:  
"In interpreting the labels of tank mixed products, the most restrictive label limitations must apply."

Note: A statement that the using public should follow the "Directions of Use" that appears of the tank mix partner is adequate and not misleading.

6. Submit one (1) copy of the final printed supplement labeling prior to your shipment under the enclosed stamped labeling.
7. Incorporate the subject supplemental labeling into your master label for Chief™ 3SC Herbicide at its next printing.

If these conditions are not complied with, this registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment under this labeling constitutes acceptance of these conditions. A stamped copy of supplemental labeling is enclosed for your records.

Sincerely yours,



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

Enclosure



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**SUPPLEMENTAL LABELING**  
**CHIEF™ 3SC**  
**OXYFLUORFEN/GLYPHOSATE HERBICIDE**  
EPA Reg. No. 66222-107

**FOR NONDORMANT APPLICATION IN GRAPES (WINE AND RAISIN GRAPES ONLY),  
PISTACHIOS, WALNUTS, AND ALMONDS (CALIFORNIA ONLY)**

SHAKE WELL BEFORE USING  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This supplemental labeling must be in the possession of the user at the time of pesticide application.
- This supplemental label contains new or supplemental instructions for use of this product which do not appear on the EPA-registered package label. Follow all instructions on this label and the label on the container carefully.
- Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on this label and the EPA registered label attached to the container.
- The length of residual control will depend on the Chief 3SC rate used. In general, the higher the rate used, the greater the length of residual control.

**GRAPES (CALIFORNIA ONLY)**  
**NONDORMANT APPLICATION**  
**GENERAL INFORMATION**

Chief 3SC may be used for the control/suppression of susceptible broad leaf weed species in nondormant grapes (raisin and wine grapes only) when applied as a directed ground spray. The total amount of Chief 3SC applied during one year (from completion of final harvest through dormancy to nondormant use) cannot exceed a total of 6 pints per acre as a result of multiple applications in any given area (broadcast or banded).

**CROP TOLERANCE INFORMATION**

The use of Chief 3SC may in some instances result in varying degrees of injury to nondormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift, soil contact) exposure to Chief 3SC. This injury may result in leaf necrosis, reddening of the foliage, leaf cupping, or crinkling of the grape leaves. The grape plant continues to grow normally. Immature, expanding leaves at the time of contact with Chief 3SC are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flicks) to the fruit.

**DOSAGE AND APPLICATION TIMING**

Chief 3SC can be applied as a nondormant application. Applications can be made to nondormant grapes during the period between the completion of bloom up through 14 days prior to harvest.

Chief 3SC is recommended for use at rates of 1 to 2 pints per broadcast acre. Do not apply more than 6 pints per broadcast acre per year as a result of multiple applications made during the dormant and nondormant season (up to 14 days prior to harvest).

**WEEDS CONTROLLED/SUPPRESSED POSTEMERGENCE (weeds up to 4 inches high)**

For postemergence control/suppression, apply 1 to 2 pints per broadcast acre to susceptible weed seedlings up to 4 inches in height. Repeat applications may be required. Applications to weeds beyond this 4-inch stage or at reduced use rates will result in reduced weed control. For enhanced postemergence activity on certain weed grasses listed and broadleaf weeds listed, a tank mixture of Chief 3SC herbicide with paraquat can be used when applied with ground application equipment. When tank mixing, read and carefully follow all 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.

CHEESEWEED (MALVA)  
FIDDLENECK, COAST

NETTLE, BURNING  
NIGHTSHADE, BLACK

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*Makhteshim Agan of North America, Inc.*  
4515 Falls of Neuse Road, Suite 300, Raleigh NC 27609  
T: 919.256.9305 • F: 919.256.9308

**ACCEPTED**  
**with COMMENTS**  
**In EPA Letter Dated:**

SEP 22 2006

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

66222-107

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GROUNDSEL, COMMON  
HENBIT  
MINER'S LETTUCE  
MORNINGGLORY SPECIES, ANNUAL  
MUSTARD, BLACK

PIGWEEED, REDROOT  
PURSLANE, COMMON  
REDMAIDS  
ROCKET, LONDON  
SOWTHISTLE, ANNUAL

For enhanced postemergence weed activity, add 2 pints of LATRON AG-98 (or comparable 80% active nonionic surfactant cleared for application to growing crops) per each 100 gallons of spray.

**TANK MIXTURES WITH CHIEF 3SC**

**IMPORTANT:** Read and observe all label directions before using. When tank mixing, always read all individual manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

For enhanced postemergence activity on a broader spectrum of weed grasses and broadleaf weeds in the berm or row middles, a tank mixture of Chief 3SC with paraquat (such as Gramoxone®) can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

**WEEDS CONTROLLED/SUPPRESSED PREEMERGENCE**

Apply 2 pints of Chief 3SC per broadcast acre.

BURCLOVER  
CHEESEWEED (MALVA)  
FIDDLENECK, COAST  
GROUNDSEL, COMMON  
HENBIT  
KNOTWEED, PROSTRATE  
LAMBSQUARTERS, COMMON  
MINERSLETTUCE  
MUSTARD, BLACK

NETTLE, BURNING  
NIGHTSHADE, BLACK  
PIGWEEED, REDROOT  
PURSLANE, COMMON  
REDMAIDS  
ROCKET, LONDON  
SHERPHERDSPURSE  
SOWTHISTLE, ANNUAL

**METHOD OF APPLICATION**

**GROUND APPLICATION:** Chief 3SC should be thoroughly mixed with clean water at recommended concentrations and applied in a minimum of 40- 20 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash crop residues. Best preemergence results are achieved when spray is applied to a relatively weed-free established berm or soil surface.

Chief 3SC should be directed to the soil and the base of vines. Use a low-pressure sprayer equipped with a breakaway boom and flat fan nozzles. An off-center (OC) nozzle positioned at the end of the boom may be desired. Spray equipment should be calibrated carefully before each use. See SPECIFIC USE RESTRICTIONS for Chief 3SC application on nondormant vine plantings.

Thoroughly flush the spray equipment (tank, hose, pump, boom) with water before and after each use. Residual Chief 3SC remaining in spray equipment may damage other crops.

**AVOID DRIFT TO ALL OTHER CROPS AND NONTARGET AREAS. DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT. CHIEF 3SC IS PHYTOTOXIC TO PLANT FOLIAGE.**

**GRAPES**

**NONDORMANT APPLICATION-CALIFORNIA ONLY**

**SPECIFIC USE RESTRICTIONS**

In addition to the following, also observe GENERAL USE RESTRICTIONS listed on the container label.

- The total amount of Chief 3SC applied during one year (from completion of final harvest through dormancy to nondormant use) must not exceed a total of 6 pints per acre as a result of multiple applications in any given area (broadcast or banded).
- Do not apply within 14 days of harvest.
- Do not make Chief 3SC applications in nondormant grapes until ~~the completion~~ after bloom.
- 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.
- Apply Chief 3SC ~~should be applied~~ only by ground application equipment.

- Apply Chief 3SC as a nondormant application to wine grapes or raisin grapes only.

**PISTACHIOS, WALNUTS, ALMONDS (CALIFORNIA ONLY)**

**NONDORMANT APPLICATION**

**GENERAL INFORMATION**

Chief 3SC provides effective weed control when applied to young broadleaf weed seedlings. For enhanced postemergence activity on certain weed grasses and broadleaf weeds, a tank mixture of Chief 3SC herbicide with paraquat can be used when applied with ground application equipment. When tank mixing, read and carefully follow all 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.

**DOSAGE**

Chief 3SC is recommended for postemergence suppression at 1 to 2 pints per broadcast acre when applied to susceptible weed seedling less than 4 inches in height. Repeat applications may be required.

For cleanup sprays and preharvest applications for contact (postemergence) control, apply Chief 3SC at 2 to 6 pints per broadcast acre to susceptible weed seedlings not exceeding the 4-inch stage. Applications to weed seedlings beyond the 4-inch stage may result in partial control.

For residual (preemergence) control of susceptible weeds, use 5 to 6 pints per broadcast acre.

**WEEDS SUPPRESSED AND/OR CONTROLLED**

CHEESEWEED (MALVA)	MORNINGGLORY SPECIES, ANNUAL
FIDDLENECK, COAST	MUSTARD, BLACK
FILAREE, BROADLEAF	NETTLE, BURNING
FILAREE, REDSTEM	PIGWEEED, REDROOT
FILAREE, WHITESTEM	PURSLANE, COMMON
GROUNDSEL, COMMON	REDMAIDS
HENBIT	ROCKET, LONDON
MINER'S LETTUCE	SOWTHISTLE, ANNUAL

**TANK MIXTURES WITH CHIEF HERBICIDE**

**IMPORTANT:** Read and follow all label directions of the tank mix partners before using. Refer to mixing directions section for Tank Mixing Precautions. Follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

**DOSAGE**

For enhanced postemergence activity on a broader spectrum of grass weeds and broadleaf weeds in the tree row middles, a tank mixture of Chief 3SC herbicide with paraquat (such as Gramoxone) can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the the labeling of tank mix partner and this product.

**WEEDS SUPPRESSED AND/OR CONTROLLED**

BARNYARDGRASS	HORSEWEED (MARESTAIL)
BLUEGRASS, ANNUAL	ROCKET, LONDON
CHICKWEED, COMMON	RYEGRASS, ITALIAN

**METHOD OF APPLICATION**

**GROUND APPLICATION:** Apply a minimum spray volume of 20 gallons of water per acre (a minimum of 10 gal./A for certain tank mix applications). Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy crop residues. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. An off-center nozzle positioned at the end of the boom may be desired. Spray equipment should be calibrated carefully before each use.

**CULTURAL CONSIDERATIONS FOR ALL APPLICATIONS:** In order to provide maximum effectiveness of preemergence activity of Chief 3SC herbicide, the berm or soil surface should be level, smooth, and free of crop or weed crop residues (decaying leaves, clippings, dead weeds, etc.). Leaves and crop residues may be removed by blowing the area to be treated or by thoroughly mixing the crop residues into the soil through cultivation prior to herbicide applications.

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Cultural practices that result in disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of Chief 3SC herbicide. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment. The best results are from applications to established berms or soil surfaces that are left undisturbed during the period for which weed control is desired.

**PISTACHIOS, WALNUTS, ALMONDS**

**NONDORMANT APPLICATION**

**SPECIFIC USE RESTRICTIONS**

In addition to the following, also observe GENERAL USE RESTRICTIONS listed on the container label.

- WHEN APPLIED AS A NON-DORMANT TREATMENT, CHIEF 3SC CAN ONLY BE APPLIED TO PISTACHIO PLANTINGS BETWEEN MAY 1 AND 7 DAYS PRIOR TO HARVEST.
- WHEN APPLIED AS A NON-DORMANT TREATMENT, CHIEF 3SC 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 Chief 3SC within 7 days of harvest of pistachio trees.
- Do not apply Chief 3SC within 30 days of harvest of almond trees.
- Do not apply Chief 3SC within 7 days of harvest of walnut trees.
- Do not apply more than 6 pints per broadcast acre of Chief 3SC during the non-dormant season.
- Chief 3SC should be applied only to healthy growing trees.
- Direct spray toward the base of tree. Avoid direct herbicide contact with foliage or nuts.