67760-98 (11/8/2012 (1/20

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

11-8-12

Carrie Tackema
Cheminova Inc
P O Box 110566
One Park Drive Suite 150
RTP NC 27709

Subject Label Amendment / CHI CHLORSUL NC 75
EPA Reg No 67760 98

Dear Carrie Tackema

The amended labeling referred to above submitted in connection with registration under the Federal Insecticide Fungicide and Rodenticide Act as amended is acceptable

Should you wish to retain the company s website on your label then please be aware that the language presented in the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to the false and misleading provisions of 40 CFR 156 10(a)(5) Therefore should the Agency find or if it is brought to our attention that a website contains claims substantially differing from the EPA approved section 3 registration the website will be referred to the EPA s Office of Enforcement and Compliance Assurance

Submit one copy of the final printed label for the record before you release the product for shipment A stamped copy of the label is enclosed for your records This master label supersedes all previously accepted labels If these conditions are not complied with the registration will be subject to cancellation in accordance with FIFRA section 6(e) Your release for shipment of the product constitutes acceptance of these conditions If you have any questions please call Erik Kraft at 703 308 9358 or email at Kraft Erik@epa gov

Sincerely

Kable Bo Davis
Product Manager 25
Herbicide Branch
Registration Division (7505P)

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CHI-CHLORSUL NC-75
Herbicide

ACTIVE INGREDIENT	
Chlorsulfuron 2 Chloro N [(4 methoxy 6 methyl 1 3 5 triazin 2 yl)aminocarbonyl] benzenesulfonamide	75 0%
Other Ingredients	25 0%
Total	100 0%

EPA Reg No 67760 98 EPA EST NO

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)

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE DAY OR NIGHT 1 866 303 6950

Read the entire label before using this product
Use only according to label instructions
Read the WARRANTY DISCLAIMER INHERENT RISKS OF USE and LIMITATION OF REMEDIES before buying or using
If terms are not acceptable return product unopened without delay
SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

ACCEPTED
11 8 12
Under the Federal Insecticide Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No 67760 98

Manufactured for
CHEMINOVA INC
One Park Drive Suite 150
P O Box 110566
Research Triangle Park NC 27709
www cheminova us com

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FIRST AID	
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice Have person sip a glass of water if able to swallow Do not induce vomiting unless told to by a poison control center or doctor Do not give anything by mouth to an unconscious person
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes Remove contact lenses if present after the first 5 minutes then continue rinsing eye Call a poison control center or doctor for treatment advice
Have a product container or label with you when calling a poison control center or doctor or going for treatment In case of emergency call toll free 1 866 303 6950	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed Causes moderate eye irritation Avoid contact with eyes or clothing Remove and wash contaminated clothing before reuse

PERSONAL PROTECTIVE EQUIPMENT

Some of the 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

Applicators and other handlers must wear

Long sleeved shirt and long pants

Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride

Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product Follow manufacturer s instructions for cleaning/maintaining PPE If no such instructions for washables use detergent and hot water Keep and wash PPE separately from other laundry

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems or enclosed cabs in a maner 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

IMPORTANT When reduced PPE is worn because a closed system is being used handlers must be provided all PPE specified above for Applicators and other handlers and have such PPE immediately available for use in an emergency such as a spill or equipment break down

User Safety Recommendations

USERS SHOULD Wash hands before eating drinking chewing gum using tobacco or using the toilet

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark Do not contaminate water by cleaning of equipment or disposing of equipment washwaters or wastes

PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site
- Make scheduled checks of spray equipment
- Assure accurate measurement of pesticides by all operation employees
- Mix only enough product for the job at hand
- Avoid over filling of spray tank
- Do not discharge excess material on the soil at a single spot in the field/grove or mxing/loading station
- Dilute and agitate excess solution and apply at labeld rates/uses
- Avoid storage of pesticides near well sites
- When triple rinsing the pesticide container be sure to add the rinsate to the spray mix

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

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

CHI CHLORSUL NC 75 should be used only in accordance with instructions on this label or in separate published Cheminova instructions

Do not apply this product through any type of irrigation system

PRODUCT INFORMATION

CHI CHLORSUL NC 75 contains the active ingredient chlorsulfuron which is a herbicide used for control of many broadleaf weeds found in pastures ranges Conservation Reserve Program (CRP) lands and non crop industrial sites (including industrial (unimproved) turf and for growth suppression and seedhead inhibition of established desirable grasses) Non crop industrial sites include airports fence rows government and private lands military installations petroleum tank farms pipeline and utility rights of way plant sites pumping installations railroads roadsides and associated rights of way and storage areas

Some of these sites may contain temporary pools of surface water as a result of site management CHI CHLORSUL NC 75 may be used to treat intermittent drainage intermittently flooded low lying sites seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present In addition CHI CHLORSUL NC 75 may be applied to bogs marshes and swamps after water has receded and to seasonally dry flood deltas DO NOT make applications to natural or man made bodies of water such as canals lakes ponds reservoirs and streams

Both preemergent and postemergent applications of CHI CHLORSUL NC 75 will control weeds although several factors (including use rate weed growth stage at the time of application and post application weather conditions) will affect the range of weeds controlled and the length of residual activity **Annual weeds** are best controlled from application of CHI CHLORSUL NC 75 in the early stages of weed development **Perennial weeds** are best controlled from application of CHI CHLORSUL NC 75 when weeds are in the bud to bloom or fall rosette stage

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CHI CHLORSUL NC 75 is a dry flowable that is mixed in water and applied as a spray

CHI CHLORSUL NC 75 is noncorrosive nonflammable nonvolatile and does not freeze

TANK MIXTURES
CHI CHLORSUL NC 75 may be applied with other herbicides and/or adjuvants registered for use in non crop sites For application method and other use specifications use the most restrictive directions for the intended combination Do not tank mix CHI CHLORSUL NC 75 with HYVAR® X L herbicide

Always perform a jar test to insure the compatibility of products to be used in tank mixture with CHI CHLORSUL NC 75 Use a clear jar with lid and mix the tank mix ingredients in their relative proportions The tank mixture is compatible if these materials mix readily when the jar is inverted several times The mixture should remain stable after standing for ½ hour or if separation occurs should readily mix if agitated An incompatible mixture is indicated by separation into distinct layers which do not readily remix when agitated and/or the presence of flakes precipitates gels or heavy oily film on the jar

SPRAY ADJUVANTS
To improve postemergence weed control a high quality spray adjuvant should be added at the manufacturer s recommended use rate Do not use LI 700 or any acidifying spray adjuvants with CHI CHLORSUL NC 75

GRAZING/HAYING
There are no grazing or hay harvest restrictions for any livestock including lactating animals with application rates up to 1 1/3 ounces per acre of CHI CHLORSUL NC 75 No exclosure is required for any animals

ENVIRONMENTAL CONDITIONS
AND BIOLOGICAL ACTIVITIY
CHI CHLORSUL NC 75 is absorbed by both the roots and foliage of plants rapidly inhibiting the growth of susceptible weeds Two to three weeks after application to weeds leaf growth slows and the growing points turn reddish purple Within four to six weeks of application leaf veins and leaves become discolored and the growing points subsequently die

Warm moist conditions following treatment enhance the effectiveness of CHI CHLORSUL NC 75 since moisture carries CHI CHLORSUL NC 75 into weed roots preventing roots from developing Cold dry conditions delay the activity of CHI CHLORSUL NC 75 Weeds hardened off by cold weather or drought stress are less susceptible to CHI CHLORSUL NC 75

CHI CHLORSUL NC 75 is safe to labeled grasses under normal conditions However grasses that are stressed from adverse environmental conditions (such as extreme temperatures or moisture) abnormal soil conditions or cultural practices may be injured by applications of CHI CHLORSUL NC 75 In addition different species of grass may be sensitive to treatment with CHI CHLORSUL NC 75 under otherwise normal conditions Application of CHI CHLORSUL NC 75 to these species may result in injury

RESISTANCE
When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field naturally occurring resistant biotypes may survive a correctly applied herbicide treatment propagate and become dominant in that field Adequate control of these resistant weed biotypes cannot be expected If weed control is unsatisfactory it may be necessary to retreat the problem area using a product affecting a

different site of action

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes it may be necessary to use tank mix partners and/or sequential herbicide applications that have a different site of action Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes Consult your consultant applicator and/or Cheminova representative for specific alternative herbicide recommendations available in your area

INTEGRATED PEST MANAGEMENT
This product may be used as part of an Integrated Pest Management (IPM) program that can include biological cultural and genetic practices aimed at preventing economic pest damage IPM principles and practices include field scouting or other detection methods correct target pest identification population monitoring and treating when target pest populations reach locally determined action thresholds Consult your professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pests in your area

STORAGE AND DISPOSAL

PESTICIDE STORAGE Store product in original container only Do not contaminate water other
pesticides fertilizer food or feed in storage

PRODUCT DISPOSAL

Nonrefillable containers equal to or less than 5 gallons
Do not reuse or refill this container Offer for recycling if available Triple 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 ¼ 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

Nonrefillable containers greater than 5 gallons
Do not reuse or refill this container Offer for recycling if available Triple rinse as follows Empty the remaining contents into application equipment or mix tank Fill the container ¼ full with water Replace and tighten closures Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds Stand the container on its end and tip it back and forth several times Turn the container over onto its other end and tip it back and forth several times Empty the rinsate into application equipment or a mix tank and store rinsate for later use or disposal Repeat this procedure two more times

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 4 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 Category A (such as butyl rubber natural rubber neoprene rubber or nitrile rubber) all ≥14 mils
Shoes plus socks

NON AGRICULTURAL USES

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

Use on noncrop sites is not within the scope of the Worker Protection Standard

Do not enter or allow entry into treated areas until sprays have dried

NON CROP SITES
Application Information
CHI CHLORSUL NC 75 is used for weed control on private public and military lands as follows nonagricultural areas (airports highway railroad and utility rights of way sewage disposal areas etc) industrial sites – outdoor (such as lumberyards pipeline and tank farms etc) including grazed areas on these sites
Application Timing, Rates and Weeds Controlled
Apply CHI CHLORSUL NC 75 as a preemergent or early postemergent spray when annual weeds are actively germinating or growing For control of perennial weeds with CHI CHLORSUL NC 75 alone best results are obtained when weeds are treated in the bud to bloom or fall rosette stage

AGRICULTURAL USES
PASTURE, RANGE AND CONSERVATION RESERVE PROGRAM (CRP)

Directions for Application To control or suppress weeds found in permanent (non rotational) pastures range and CRP lands apply CHI CHLORSUL NC 75 at the rates listed in the table below and follow all directions for use on this label Apply by ground or air (fixed wing aircraft or helicopter) equipment Up to 1/3 ounces CHI CHLORSUL NC 75 may be applied only as a spot treatment for specific grasses only if the resulting injury and possible loss of forage is acceptable

Timing Optimum results are seen when ***perennial*** weeds are treated in the bud to bloom or the fall rosette stage and when ***annual*** weeds are treated at early growth stages

Weeds Refer to the section ***Weeds Controlled by CHI CHLORSUL NC 75***

Restrictions Do not apply more than 1 1/3 ounce of CHI CHLORSUL NC 75 per acre per year

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NOTE No hay harvest restrictions or grazing restrictions for livestock (including lactating animals) apply when CHI CHLORSUL NC 75 is applied at up to 1 1/3 ounces per acre Animals do not need to be enclosed

Precautions

- Severe stunting and injury will occur from application of CHI CHLORSUL NC 75 to sensitive broadleaf forage species (such as clover and alfalfa)
- Injury to forage grasses which are under stress (due to drought insects disease cold temperature or poor fertility) may occur from CHI CHLORSUL NC 75 applications
- Do not apply CHI CHLORSUL NC 75 to forage grasses unless well established or the newly emerged seedlings of sensitive forage grasses will be injured
- Tolerance of different varieties and species of forage grasses to CHI CHLORSUL NC 75 may vary Before using CHI CHLORSUL NC 75 on certain grass for the first time only apply CHI CHLORSUL NC 75 to a small area Once it has been determined that injury will not occur larger areas may be treated in the next season Examples of varietal sensitivity to CHI CHLORSUL NC 75 include
    - abortion or suppression of seedheads by some cool season grasses if CHI CHLORSUL NC 75 is applied before the initiation of flowering
    - possible severe injury in perennial and Italian ryegrasses
    - temporary stunting or yellowing of fescues

RATES FOR CONTROL OR SUPPRESSION OF WEEDS IN FORAGE GRASSES

¼ to ½ ounce per acre

Bluestems (big little plains sand ww spar)	*Andropogon spp*
Buffalograss	*Buchloe dactyloides*
Fescue tall Kentucky hard creeping†	*Festuca spp*
Green needlegrasses	*Stipa vindula*
Indiangrass	*Sorghastrum nutans*
Kleingrass	*Panicum coloratum*
Lovegrass (sand weeping)	*Eragrostis spp*
Switchgrass	*Panicum virgatum*
Wildrye grasses	*Elymus spp*

† For sensitive fescue use the lower use rate

½ to 1 ounce per acre

Bahiagrass	*Paspalum notatum*
Bermudagrass	*Cynodon dactylon*
Blue gramma	*Bouteloua gracilis*
Bluegrass	*Poa spp*
Bromegrass (meadow smooth)	*Bromus spp*
Orchardgrass	*Dactylis glomerata*
Wheatgrasses (crested intermediate pubescent slender streambank tall thick spike western)	*Agropyron spp*

SPOT APPLICATIONS

PASTURE, RANGE AND CONSERVATION RESERVE PROGRAM (CRP) Spot applications will aid in the control of weeds in pastures ranges and CRP land Apply CHI CHLORSUL NC 75 using equipment such as back pack sprayers to deliver the spray to the foliage and stems The height and density of weeds and type of application equipment employed will determine the

application volume Optimum results are obtained from a thorough uniform coverage of the foliage stems Postemergence control of weeds improves from the addition of a spray adjuvant (0 25% volume or use the manufacturer s labeled rate)

Mix 1 gram of CHI CHLORSUL NC 75 and the surfactant with 1 gallon of water Spray the weeds so that the entire surface of the weeds become wet At this rate approximatel 35 gallons of solution will treat 1 acre

NON CROP SITES
Mix 1 3 ounces of CHI CHLORSUL NC 75 with 100 gallons of water Do not apply more than 300 gallons of the CHI CHLORSUL NC 75 at the 1 ounce spray mix rate per acre and no more than 100 gallons of the CHI CHLORSUL NC 75 of the 3 ounces spray mix rate per acre

SPRAY DRIFT CONTROL AGENTS
Include a spray drift control agent with the CHI CHLORSUL NC 75 tank mix to reduce the chance of drift Follow the manufacturer s labeled rate for the drift control agent

CROP ROTATION
Do not treat all acres (pastures rangeland or CRP) at the same time with the CHI CHLORSUL NC 75 if rotational crop plantback flexibility is desired

NON AGRICULTURAL USES

NON CROP SITES – INDUSTRIAL AREAS
To control annual biennial and perennial broadleaf weeds found in non crop industrial areas (airports fence rows government and private lands military installations petroleum tank farms pipeline and utility rights of way plant sites pumping installations railroads roadsides and associated rights of way and storage areas) apply CHI CHLORSUL NC 75 at the rates listed in the sections below and follow all directions for use on this label Apply by ground equipment unless directed otherwise by Special Local Need or Supplemental labeling Make preemergent or early postemergent spray applications of CHI CHLORSUL NC 75 to actively germinating or growing **annual** weeds **Perennial weeds** are best controlled from application of CHI CHLORSUL NC 75 when weeds are in the bud to bloom or fall rosette stage

INDUSTRIAL TURF
(Unimproved Only)
Directions for Application
To control weeds found in industrial turf (unimproved) on roadside or non crop sites apply CHI CHLORSUL NC 75 at the rates listed in the table below and follow all directions for use on this label The higher CHI CHLORSUL NC 75 rates will control weeds for longer periods of time compared with the lower CHI CHLORSUL NC 75 rates Temporary chlorosis of desirable grasses may occur when CHI CHLORSUL NC 75 is applied at the higher rate or in combination with a surfactant
Application Timing
Apply CHI CHLORSUL NC 75 when desirable grasseshave become well established to avoid any top kill or stand reduction For best results treat turf at green up
WEEDS Refer to the section **Weeds Controlled by CHI CHLORSUL NC 75**
RATES FOR CONTROL OR SUPPRESSION OF WEEDS IN INDUSTRIAL TURF

¼ to 1 ounce per acre

Bahiagrass	*Paspalum notatum*
Bermudagrass	*Cynodon dactylon*
Blue gramma	*Bouteloua gracilis*

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Bluegrass	*Poa spp*
Bromegrass (meadow smooth)	*Bromus spp*
Orchardgrass	*Dactylis glomerata*
Wheatgrasses (crested intermediate pubescent slender streambank tall thick spike western)	*Agropyron spp*

½ ounce per acre

Bentgrass	*Agrostis spp*
Bluestems (big little plains sand ww spar)	*Andropogon spp*
Buffalograss	*Buchloe dactyloides*
Galleta	*Hilaria jamesii*
Needlegrass green	*Stipa viridula*
Green sprangletop	*Leptochloa dubia*
Indiangrass	*Sorghastrum nutans*
Indian ricegrass	*Oryzopsis hymenoides*
Kleingrass	*Panicum coloratum*
Lovegrass (sand weeping)	*Eragrostis spp*
Prairie sandreed	*Calamovilfa longifolia*
Sheep fescue	*Festuca ovina*
Sideoats gramma	*Bouteloua curtipendula*
Switchgrass	*Panicum virgatum*
Wildrye grasses (beardless Russian)	*Elymus spp*

¼ to ½ ounce per acre

Fescue	*Festuca spp*
Smooth brome	*Bromus invermis*

GRASS GROWTH SUPPRESSION AND SEEDHEAD INHIBITION

Application Information

CHI CHLORSUL NC 75 as a tank mix with other herbicides may be used to suppress grass growth (chemical mowing) and inhibit seedhead formation

Application Timing

Apply CHI CHLORSUL NC 75 to turf at green up and before seed heads emerge (boot stage) Ensure that desirable grasses are well established at application as premature treatment may result in top kill and stand reduction

Application Rates and Weeds Controlled

Refer to the WEEDS CONTROLLED section below for rates to control various weeds When applied at lower rates CHI CHLORSUL NC 75 provides short term control of weeds listed when applied at higher rates weed control is increased

CHI CHLORSUL NC 75 may be used on the following grasses when applied at the use rates shown below

¼ ounce CHI CHLORSUL NC 75 + ¼ ½ pt Embark' 2S

Fescue	*Festuca spp*
Bluegrass	*Poa spp*

½ ounce CHI CHLORSUL NC 75 + ½ 1 pt "Embark" 2S (PNW Only)

Fescue	*Festuca spp*
Annual bluegrass	*Poa annua*
Halogeton	*Haolgeton glomeratus*
Perennial ryegrass	*Lolium perenne*
Smooth brome	*Bromus invermis*
Orchardgrass	*Dactylis glomerata*
Reed canarygrass	*Phalaris arundinacea*

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USE PRECAUTIONS (Industrial Turf Only)

- Do not use CHI CHLORSUL NC 75 in a tank mix with Embark on bahiagrass turf or turf that is under stress from drought insects disease cold temperature or poor fertility as injury may result
- Do not apply CHI CHLORSUL NC 75 to turf less than 1 year old
- Grass seed may be planted in treated areas six months after treatment cultivation is recommended
- For broadcast applications do not exceed ½ ounce CHI CHLORSUL NC 75 per acre within a 12 month period For those weeds listed under the 1 to 3 ounce application rate in the Non crop Industrial Sites section of this label spot treatment (at that rate) is recommended Do not make broadcast applications to turf at 1 to 3 ounces as this may cause excessive turf injury

WEEDS CONTROLLED

CHI CHLORSUL NC 75 effectively controls the following weeds when applied at the use rates shown When applied at lower rates CHI CHLORSUL NC 75 provides short term control of weeds listed when applied at higher rates weed control is increased

¼ to ½ ounce per acre

Annual sowthistle	*Sonchus oleraceus*
Blue mustard	*Chorispora tenella*
Common chickweed	*Stellaria media*
Common speedwell	*Veronica officinalis*
Common spikeweed	*Hemizonia pungens*
Conical catchfly	*Silene conoidea*
Cutleaf eveningprimrose	*Oenothera laciniata*
Fiddleneck (tarweed)	*Amsinckia lycopsoides*
Field pennycress	*Thalspi arvense*
Flixweed	*Descurainia Sophia*
Hempnettle	*Galeopsis spp*
Henbit	*Lamium amplexicaule*
London rocket	*Sisymbrium iro*
Mayweed	*Anthemis cotula*
Miner s lettuce	*Montia perfoliata*
Pineapple weed	*Matricaria matricarioides*
Prostrate pigweed	*Amaranthus blitoides*
Redroot pigweed	*Amaranthus retroflexus*
Shepherd s purse	*Capsella bursa pastoris*
Smooth pigweed	*Amaranthus chlorostachys*
Treacle mustard	*Erysimum spp*
Tumble mustard (Jim Hill)	*Sisybrium altissimum*
Wild mustard	*Sinapis arvensis*

Except California

½ 1 ounce per acre

Bouncingbet	*Saponaria officinalis*
Bur beakchervil	*Anthriscus caucalis*
Buttercup	*Ranunculus spp*
Carolina geranium	*Geranium carolinianum*
Common lambsquarter	*Chenopodium album*
Common sunflower	*Helianthus annuus*
Dandelion (common)	*Taraxacum officinale*
Erect knotweed	*Polygonum erectum*
Goldenrod	*Solidago spp*
Groundsel (common)	*Senecio vulgaris*
Halogeton	*Halogeton glomeratus*
Musk thistle	*Carduus nutans*
Sicklepod	*Senna obtusifolia*

Smallseed falseflax	*Camelina microcarpa*
Sweet clover	*Melilotus spp*
Tumble pigweed	*Amaranthus albus*
Turkey mullein	*Eremocarpus setigerus*
Whitetop (hoary cress)†	*Cardaria draba*
Wild buckwheat	*Polygonum convolvulus*
Wild parsnip	*Pastinaca sativa*

Partial control only
Except California
† Prebloom to bloom and fall rosette

1 to 3 ounces per acre

Asters	*Aster spp*
Bedstraw	*Galium spp*
Black mustard	*Brassica nigra*
Bull thistle	*Cirsium vulgare*
Burclover	*Medicago spp*
Canada thistle	*Cirsium arvense*
Common cinquefoil	*Potentilla canadensis*
Common mallow	*Malva neglecta*
Common mullein	*Verbascum thapsus*
Common ragweed	*Ambrosia elatior*
Common tansy	*Tanacetum vulgare*
Common teasel	*Dipsacus fullonum*
Common yarrow	*Achillea millefolium*
Corn spurry	*Spergula arvensis*
Cow cockle	*Vaccaria pyramidata*
Curly dock	*Rumex crispus*
Dyer s woad	*Isatis tinctoria*
False chamomile	*Matricaria matrima*
Foxtails	*Setaria spp*
Horsetail (Equisetum spp)	*Equisetum spp*
Houndstongue common	*Cynoglossum officinale*
Italian ryegrass	*Lolium multiflorum*
Marestail/horseweed	*Conyza canadensis*
Pepperweed	*Lepidium spp*
Pepperweed (perennial)	*Lepidium latifolium*
Poison hemlock	*Conium maculatum*
Prostrate knotweed	*Polygonum aviculare*
Puncturevine	*Tribulus terrestris*
Red clover	*Trifolium pratense*
Russian knapweed†	*Acroptilon repens*
Scotch thistle	*Onopordum acanthium*
Scouringrush	*Equisetum hyemale*
Sickleweed	*Falcaria vulgaris*
Spreading orach	*Atriplex patula*
Tansymustard	*Descurainia pinnata*
Tansy ragwort	*Senecio jacobaea*
White clover	*Trifolium repens*
Wild carrot	*Daucus carota*
Wild garlic/wild onion	*Allium vineale*
Yellow starthistle	*Centaurea solstitalis*

Partial control only
Except California
† Prebloom to bloom and fall rosette

SPECIFIC WEED PROBLEMS

Dalmatian Toadflax (*Linaria genistifolia*) Apply two to three ounces of CHI CHLORSUL NC 75 per acre as a high volume foliar spray using a minimum of 24 gallons of water per acre Use of a surfactant as directed on this label is recommended Fall applications of CHI CHLORSUL NC 75 appear to provide the most consistent control

Yellow Toadflax (*Linaria vulgaris*) Apply a minimum of 1 5 ounces of CHI CHLORSUL NC 75 per acre

Kochia Russian Thistle, and Prickly Lettuce Tank mix CHI CHLORSUL NC 75 with herbicides with different modes of action (such as 2 4 D plus dicamba) and apply postemergence before weeds form mature seeds

Yellow Starthistle (*Centaurea solstitialis*) Apply CHI CHLORSUL NC 75 at ½ to 3 ounces per acre in combination with the labeled rates of other herbicides registered for this use (such as Transline Tordon 22K or 2 4 D) For application method and other use instructions use the most restrictive directions for the intended use To improve postemergence control a spray adjuvant should be added at the manufacturer s recommended use rate

When applied at lower rates CHI CHLORSUL NC 75 provides short term control when applied at higher rates weed control spectrum and residual is increased

Rainfall is needed following the application for activation of CHI CHLORSUL NC 75 to provide the preemergence control of yellow starthistle Applications should be made from early emergence to bolting stage of growth

GRASS REPLANT INTERVALS

Following an application of CHI CHLORSUL NC 75 to non crop areas the treated sites may be replanted with various species of grasses at the minimum intervals recommended below

For soils with a pH of 7 5 or less observe the following replant intervals

CHI CHLORSUL NC 75

Replant Interval

Species	Rate oz/acre	(Months)
Brome meadow	½ 1	1
Bromus erectus	1 2	2
Brome smooth	/ 1	2
Bromus inermis	1 2	4
Fescue alta/tall	/	2
Festuca arundinacea	1	3
	2	5
Fescue sheep	½ 1	2
Festuca ovina	1 2	4
Foxtail meadow	½	3
Alopecurus pratensis	1	4
	2	6
Needlegrass green	½ 2	1
Stipa viridula		
Orchardgrass	½	2
Dactylis glomerata	1 2	3
Russian wildrye	½ 2	1
Elymus spp		
Switchgrass	½ 2	3
Panicum virgatum		
Timothy	/	2
Phelum pratense	1	4
	2	6
Wheatgrass western	½	1
Agropyron smithii	1	2
	2	4

For soils having a pH of 7 5 and greater observe the following minimum replant intervals

CHI CHLORSUL NC 75

Replant Interval

Species	Rate oz/acre	(Months)
Alkali sacaton	⅟	1
Sporobolus airoides	1	3
	2	>3
Bluestern Big	/	3
Andropogon gerardii		
Brome Mountain	½	1
Bromus marginatus	1	2
	2	>3
Gramma Blue	½	1
Bouteloua gacilis	1	2
	2	>3
Gramma Sideoats	1 2	>3
Bouteloua curtipendula		
Switchgrass	1 2	>3
Panicum virgatum		
Wheatgrass Bluebunch	1 1/3	1
Agropyron spictatum	1 1/3	1
Wheatgrass Crested	2/3	1
Agropyron cristatum		
Wheatgrass intermediate	1 1/3	1
Agropyron intermedium		
Wheatgrass Slender	1 1/3	1
Elymus trachycaulum		
Wheatgrass Siberian	1 1/3	1
Agropyron fragile		
Wheatgrass Streambank	1 1/3	1
Agropyron riparium		
Wheatgrass Thickspike	/ 2	1
Agropyron dasystachyum		
Wheatgrass Western	½	1
Agropyron smithii	1	2
	2	4

The stated minimum intervals are for applications made in the spring to early summer Because CHI CHLORSUL NC 75 degradation is slowed by cold or frozen soils applications made in the late summer or early fall should consider the intervals as beginning in the spring following treatment

Testing has indicated that there is a considerable variation in response among the species of grasses when seeded onto areas treated with CHI CHLORSUL NC 75 If species other than those listed above are to be planted into areas treated with CHI CHLORSUL NC 75 a field bioassay should be performed or previous experience may be used to determine the feasibility of replanting treated sites

ADDITIONAL USE INSTRUCTIONS

SPRAY EQUIPMENT

For non crop sites apply CHI CHLORSUL NC 75 using ground equipment only or as otherwise directed by Supplemental or Special Local Need Labeling

Equipment used to apply CHI CHLORSUL NC 75 should not be used for applications to crops following a CHI CHLORSUL NC 75 application as low rates of CHI CHLORSUL NC 75 may kill or severely injure most crops

For specific application equipment refer to the manufacturer s recommendations for additional information on GPA pressure speed nozzle types and arrangements nozzle heights above the

target canopy etc

Be sure to calibrate air or ground equipment before application Select a spray volume and delivery system that will ensure a uniform spray pattern and thorough coverage of weed pests Use higher spray volumes to obtain better coverage when the weed canopy is dense Avoid swath overlapping and shut off spray booms while starting slowing or stopping to avoid crop injury

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray drift onto nontarget sites For additional information on spray drift refer to the Spray Drift Management section of the label

Continuous agitation is required to keep CHI CHLORSUL NC 75 in suspension

NOTE
Using ammonia solution will help solubilize the CHI CHLORSUL NC 75 This reduces the need to agitate the tank mixture to prevent settling out The product will usually remain stable in this solution for a maximum of one to three days under normal conditions A pH range of 7 to 8 is ideal for this spray mix solution Mixing and spraying the product immediately will provide the best results

Mix one fluid ounce (2 tablespoons) of ammonia solution (3% active) with every ounce (by weight) of CHI CHLORSUL NC 75 used in the spray tank

GROUND APPLICATION

BROADCAST APPLICATION
Use 20 to 40 GPA when applying CHI CHLORSUL NC 75 as a broadcast application Be sure to calibrate sprayers before application Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern When spraying industrial turf avoid overlapping and shut off spray booms while starting turning slowing or stopping to avoid injury to desired species

HIGH VOLUME HANDGUN APPLICATION
When making applications of CHI CHLORSUL NC 75 with a handgun apply at up to 100 gallons of spray solution per acre (GPA) Mix CHI CHLORSUL NC 75 at 1 to 3 ounces per acre plus an adjuvant Add a foam reducing agent if needed Use the higher rate for hard to control species but do not apply more than 3 ounces per acre Apply evenly to ensure thorough coverage of the site and weed pest(s) to be treated

INVERT SPRAY APPLICATION
Apply the high viscosity invert solution as a total volume of 10 to 40 gallons per acre Mix ¼ to 3 ounces of CHI CHLORSUL NC 75 per acre in the water phase of the invert solution Refer to the Weeds Controlled sections of this label for selecting the appropriate use rate for the target weeds Follow all use directions and cautionary statements appearing on the labels of the inverting oils and additives or listed in the operators manual of the inverting equipment by its manufacturer

AERIAL APPLICATION
Use nozzle types and arrangements that provide optimum spray distribution and maximize coverage

Use a minimum of 3 GPA

When applying CHI CHLORSUL NC 75 by air in areas adjacent to sensitive crops use solid

stream nozzles oriented straight back Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields See the Spray Drift Management section of this label

BIOASSAY

A field bioassay must be completed before rotating to grass species/variety not listed in this label

To conduct a field bioassay grow test strips of the grass(es) you plan to grow the following year in fields previously treated with CHI CHLORSUL NC 75 Grass response to the bioassay will indicate whether or not to rotate to the grass(es) grown in the test strip

If a field bioassay is planned check with your local supplier or Cheminova representative for information detailing the field bioassay procedure

IMPORTANT PRECAUTIONS

Injury to or loss of desirable trees or other plants may result from the following

- Do not apply CHI CHLORSUL NC 75 directly to moving or standing bodies of water Do not allow CHI CHLORSUL NC 75 to drift or move or be washed into moving or standing bodies of water This is especially true for irrigation waters as small amounts of CHI CHLORSUL NC 75 could severely injure or kill crops
- If equipment is drained or flushed on or near desirable trees or other plants on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots
- Treatment of powdery dry soil and light sandy soils when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water Injury to crops may result if treated soil is washed blown or moved onto land used to produce crops Exposure to CHI CHLORSUL NC 75 may injure or kill most crops (except small grains) Injury may be more severe when crops are irrigated
- Applications made during periods of intense rainfall to soils saturated with water surfaces paved with materials such as asphalt or concrete or soils through which rainfall will not readily penetrate may result in runoff and movement of CHI CHLORSUL NC 75 Do not treat frozen soil Treated soil should be left undisturbed to reduce the potential for CHI CHLORSUL NC 75 movement by soil erosion due to wind or water
- When CHI CHLORSUL NC 75 is applied at rates of 1 1/3 ounce/a and less there is no restriction on grazing or haying of forage grasses
- Grass species or varieties may differ in their response to various herbicides Cheminova recommends that you first consult your state experiment station university or extension agent as to sensitivity to any herbicide If no information is available limit the initial use of CHI CHLORSUL NC 75 to a small area Components in a grass seed mixture will vary in tolerance to CHI CHLORSUL NC 75 so the final stand may not reflect the seed ratio
- Under certain conditions such as heavy rainfall high pH prolonged cold weather or wide fluctuations in day/night temperatures prior to or soon after CHI CHLORSUL NC 75 application temporary discoloration and/or grass injury may occur CHI CHLORSUL NC 75 should not be applied to grass that is stressed by severe weather conditions drought low fertility water saturated soils disease or insect damage as grass injury may result Severe winter stress drought disease or insect damage before or following application

of CHI CHLORSUL NC 75 may also result in grass injury

- Applications of CHI CHLORSUL NC 75 to rights of way undersown with legumes may cause injury to the legumes Legumes in a seeding mixture may be severely injured or killed following an application of CHI CHLORSUL NC 75

USE RESTRICTIONS

- Do not use on lawns walks driveways tennis courts or similar areas
- Do not apply through any type of irrigation system
- Do not use this product in the following counties of Colorado Saguache Rio Grande Alamosa Costilla and Conejos

MIXING INSTRUCTIONS

1 Fill the tank ¼ to 1/3 full of water
2 While agitating add the required amount of CHI CHLORSUL NC 75
3 Continue agitation until CHI CHLORSUL NC 75 is fully dispersed at least 5 minutes
4 Once the CHI CHLORSUL NC 75 is fully dispersed maintain agitation and continue filling tank with water CHI CHLORSUL NC 75 should be thoroughly mixed with water before adding any other material
5 As the tank is filling add tank mix partners (if desired) and then add the necessary volume of spray adjuvants Always add spray adjuvants last
6 If the mixture is not continuously agitated settling will occur If settling occurs thoroughly re agitate before using
7 Apply CHI CHLORSUL NC 75 spray mixture within 24 hours of mixing to avoid product degradation
8 If CHI CHLORSUL NC 75 and a tank mix partner are to be applied in multiple loads pre slurry the CHI CHLORSUL NC 75 in clean water prior to adding to the tank This will prevent the tank mix partner from interfering with the dissolution of the CHI CHLORSUL NC 75

Do not use CHI CHLORSUL NC 75 with spray additives that reduce the pH of the spray solution to below 5 0

SPRAYER CLEANUP

Spray equipment must be cleaned before CHI CHLORSUL NC 75 is sprayed Immediately following application of CHI CHLORSUL NC 75 follow the cleanup procedures specified on the labels of previously applied products If no directions are provided follow the steps outlined in the SPRAYER CLEANUP section of this label

AT THE END OF THE DAY

When multiple loads of CHI CHLORSUL NC 75 are applied it is recommended that at the end of each day of spraying the interior of the tank be rinsed with fresh water and then partially filled and the boom and hose flushed This will prevent the buildup of dried pesticide deposits that can accumulate in the application equipment

Thoroughly clean all mixing and spray equipment immediately following applications of CHI CHLORSUL NC 75 as follows

1 Drain tank rinse interior surfaces of tank then flush tank boom and hoses with clean water for a minimum of 5 minutes
2 Fill the tank with clean water and add the cleaning solution* Flush the boom hoses and nozzles with the cleaning solution Allow them to sit for 15 minutes with agitation running and then drain the tank

3 Repeat Step 2
4 Repeat Step 1
5 Remove the nozzles and screens and clean separately To remove traces of cleaning solution rinse the tank thoroughly with clean water and flush through the hoses and boom

* Use cleaning solutions such as the following
  1 One gal ammonia (containing 3% active) per 100 gal of water
  2 Nutra sol (carefully read and follow Nutra sol label directions)
  3 Loveland Spray Tank Cleaner (carefully read and follow Loveland Spray Tank Cleaner label directions)
  4 Tank Cleaner (carefully read and follow Tank Cleaner label directions)

Note This sprayer cleanup procedure is only effective for CHI CHLORSUL NC 75 and for general uses specified under Directions for Use Do not use the sprayer on food crops (except wheat barley and oats) feed crops fine turf ornamentals and other desirable plants

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determines the potential for spray drift The applicator is responsible for considering all these factors when making application decisions

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 200 microns) The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control The presence of sensitive species nearby the environmental conditions and pest pressure may affect how an applicator balances drift control and coverage APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See **Wind, Temperature and Humidity** and **Surface Temperature Inversions** sections of this label

Controlling Droplet Size – General Techniques

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume Nozzles with higher rated flows produce larger droplets
- **Pressure** – Use the lower spray pressures recommended for the nozzle Higher pressure reduces droplet size and does not improve canopy penetration WHEN HIGHER FLOW RATES ARE NEEDED USE A HIGHER CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE
- **Nozzle Type** – Use a nozzle type that is designed for the intended application With most nozzle types narrower spray angles produce larger droplets Consider using low drift nozzles

Controlling Droplet Size – Aircraft

- **Number of Nozzles** – use the minimum number of nozzles with the highest flow rate that provide uniform coverage
- **Nozzle Orientation** – Orientating nozzles so that the spray is emitted backwards parallel to the airstream will produce larger droplets than other orientations
- **Nozzle Type** – Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types

BOOM LENGTH AND HEIGHT

- **Boom Length (aircraft)** – The boom length must not exceed ¾ of the wing length using shorter booms decreases drift potential For helicopters use a boom length and position that prevents droplets from entering the rotor vortices
- **Boom Height (aircraft)** – Application more than 10 ft above the canopy increases the potential for spray drift

- **Boom Height (ground)** – Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind The boom should remain level with the crop and have minimal bounce

WIND

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph However many factors including droplet size and equipment type determine drift potential at any given wind speed AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS

Note Local terrain can influence wind patterns Every applicator should be familiar with local wind patterns and how they affect spray drift

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions set up equipment to produce larger droplets to reduce effects of evaporation

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion Surface inversions restrict vertical air mixing which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind They begin to form as the sun sets and often continue into the morning Their presence can be indicated by ground fog however if fog is not present inversions can also be identified by the movement of smoke from a ground source to an aircraft smoke generator Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates a surface inversion while smoke that moves upward and rapidly dissipates indicates a good vertical air mixing

ADDITIONAL USE PRECAUTIONS

SENSITIVE AREAS

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e g residential areas bodies of water known habitat for threatened or endangered species non target crops) is minimal (e g when wind is blowing away from the sensitive areas)

DRIFT CONTROL ADDITIVES

Drift control additives may be used with all spray equipment with the exception of controlled droplet applicators When a drift control additive is used read and carefully observe cautionary statements and all other information on the label It is recommended that drift control additives be certified by the Chemical Producers and Distributors Association (CPDA)

WIND EROSION

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion Under these conditions the soil surface should first be settled by rainfall or irrigation

IMPORTANT READ BEFORE USE

Read the entire Directions for Use Conditions Disclaimer of Warranties and Limitations of liability before using this product

If terms are not acceptable return the unopened product container at once By using this product user or buyer accepts the following warranty disclaimer inherent risks of use and limitation of remedies

WARRANTY DISCLAIMER

Cheminova 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 CONSISTENT WITH APPLICABLE LAW CHEMINOVA 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 Crop 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 temperatures 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 Cheminova or the seller All such risks shall be assumed by the Buyer

LIMITATION OF REMEDIES

To the extent consistent with applicable law the excluse 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 Cheminova 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

Cheminova shall not be liable for losses or damages resulting from handling or use of this product unless Cheminova is promptly notified of such loss or damage in writing In no case shall Cheminova be liable for consequential or incidental damages or losses The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements No employee or sales agent of Cheminova 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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