264-1075 9/3/2013 1/12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

SEP 03 2013

George J. Sabbagh
Bayer Crop Science
2 T.W. Alexander Drive
P.O. Box 12014
RTP, NC 27709

Dear Dr. Sabbagh:

SUBJECT: Label Amendment
Wolverine Herbicide
EPA Registration No. 264-1075
Your Application Dated January 14, 2013
Decision #474241

The label amendment referred to above, submitted in accordance with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one (1) copy of your final printed labeling before you release the product for shipment. This amended labeling supersedes all previously accepted ones.

Sincerely yours,

Kathryn V. Montague

Kathryn V. Montague
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

2/12

GROUP 1 6 27 HERBICIDE

Wolverine™ Herbicide

For Selective Postemergence Control of Most Annual Grassy Weeds (Including Wild Oat and Foxtail Species) and Broadleaf Weeds in Wheat and Barley

ACTIVE INGREDIENTS:	
Fenoxaprop-p-Ethyl	4.47%
Pyrasulfotole	1.94%
Bromoxynil Octanoate	4.95%
Bromoxynil Heptanoate	4.79%
OTHER INGREDIENTS	83.85%
TOTAL:	100.00%

Contains petroleum distillates.

Contains 0.38 pound Fenoxaprop-p-Ethyl, 0.17 pound Pyrasulfotole, 0.42 pound, Bromoxynil Octanoate, and 0.41 pound Bromoxynil Heptanoate.

EPA Reg. No. 264-1075 **EPA Est.**

KEEP OUT OF REACH OF CHILDREN

DANGER

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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Immediately call a poison control center or doctor for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything by mouth to an unconscious person.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577. **Have the product container or label with you when calling a poison control center or doctor or going for treatment.**	
NOTE TO PHYSICIAN: No specific antidote is available. Possible mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, 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.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils, and protective eyewear (safety glasses).

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.

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 Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENT

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/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 pesticide is toxic to fish and aquatic invertebrates. 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 any body of water and do not apply when/where conditions could favor runoff. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate. Do not allow sprays to drift onto desirable plants. Drift or runoff may adversely affect non-target plants.

Ground Water Advisory:

Pyrasulfotole is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Surface Water Advisories:

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

4/12

DIRECTIONS FOR USE

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

Do not use this product until you have read the entire label. 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.

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, wear: coveralls over long-sleeved shirt and long pants; socks and chemical resistant footwear. Wear goggles or face shield, and chemical resistant gloves (such as nitrile, butyl, neoprene, and/or barrier laminate).

USE INFORMATION

Wolverine™ Herbicide is designed for broad spectrum postemergence control of important grass and broadleaf weed species in wheat (including durum wheat) and barley.

ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

Wolverine Herbicide is a postemergence herbicide and best results are obtained when applications are made to young actively growing weeds. Wolverine Herbicide is primarily absorbed through the foliage and thorough spray coverage is important.

CROPS

Wolverine Herbicide may be used in wheat, including durum and barley.

APPLICATION TIMING

Wheat

Apply Wolverine Herbicide to the crop from emergence up to 60 days prior to harvest in the states of Minnesota, Montana, North Dakota, and South Dakota, 70 days prior to harvest in other states.

Barley

Apply Wolverine Herbicide to the crop from emergence up to the 5-leaf stage.

Weed Application Timing

Grass Weeds: Wolverine Herbicide has no effect via the soil on grass weeds and will only control emerged grass weeds. Wolverine Herbicide when applied as directed will control the annual grass weeds listed in ***GRASS WEED CHART***.

Wolverine Herbicide will control susceptible grass weeds in the 1-leaf (fully expanded) to 2-tiller stage of growth. Blackgrass can be controlled over a wide range of growth stages, from the 1-leaf (fully expanded) through the advanced tillering stage. Windgrass will be controlled from emergence to a height of 3 inches.

Broadleaf Weeds: See ***BROADLEAF WEED CHART*** for a list of susceptible weed species and maximum stage of growth at application for best results.

APPLICATION DOSAGE and METHODS

Dosage: One case will treat 20 acres at 1.7 pt/A. Do not use less than the 1.7 pt/A unless directed by a Bayer CropScience representative.

Ground Application

Properly calibrated ground application equipment may be used to apply Wolverine Herbicide postemergence as a foliar spray. Select spray nozzles that provide best spray distribution and weed coverage at the appropriate spray pressure. Ground speed for application should not exceed 10 mph. Avoid uneven spray distribution, skips, overlaps, and spray drift.

Apply the appropriate dosage broadcast in 10 or more gallons of water per acre. Under conditions where large grass weeds or dense weed populations are present or adverse environmental conditions exist, a greater spray volume of 15 – 20 gallons of spray solution per acre is required for best weed control. DO NOT apply with hollow cone type nozzles or other nozzles that produce a fine droplet spray. Use nozzles and spray pressure for ground application that deliver medium spray droplets as indicated in the nozzle manufacturer's catalogs such as 80-degree or 110-degree flat-fan nozzles in accordance with ASAE Standard S-572 for optimum spray coverage and canopy penetration. Use screens that are 50 mesh or larger.

Do not use flood-jet nozzles or cone nozzles. Nozzle types, nozzle spacings and lower spray pressures that produce coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control.

See the **Spray Drift Management** section of this label for additional information on proper application of Wolverine Herbicide.

Aerial Application: Calibrate aerial (fixed wing or helicopter) spray equipment prior to use. Wolverine Herbicide should be applied in a minimum spray volume of 5 gallons per acre if crop canopy and weed density allow adequate spray coverage.

To get uniform spray coverage, use nozzles and pressure that deliver medium spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE standard S-572. DO NOT use raindrop nozzles.

Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

WEED CONTROL DIRECTIONS

Wolverine Herbicide is a postemergence herbicide and best results are obtained when applications are made to young actively growing weeds. Treat heavy weed infestations before they become competitive with the crop. Thorough coverage of weeds is necessary to obtain good weed control.

Postemergence application of Wolverine Herbicide will control the following grass and broadleaf weeds.

Grass Weed Chart

Wolverine Herbicide will control susceptible grass weeds in the 1-leaf (fully expanded) to 2-tiller stage of growth. Blackgrass can be controlled over a wide range of growth stages, from the 1-leaf (fully expanded) through the advanced tillering stage. Windgrass will be controlled from emergence to a height of 3 inches. Applications should be made to young, vigorously growing weeds.

Grass Weed Species, Common Name	Grass Weed Species, Scientific Name
Green foxtail	*Setaria viridis*
Foxtail millets (volunteer), common, Siberian, Hungarian, German millet	*Setaria italica*
Volunteer corn	*Zea mays*
Yellow foxtail	*Setaria pumila*
Proso millet (volunteer, wild)	*Panicum iliaceum*
Barnyardgrass	*Echinochloa crus-galli*
Blackgrass	*Alopecurus myosuroides*
Hood canarygrass	*Phalaris paradoxa*
Littleseed canarygrass	*Phalaris minor*
Windgrass	*Apera interrupta*
Wild oat	*Avena fatua*
Field sandbur	*Cenchrus incertus*
Woolly cupgrass	*Erichloa villosa*

6/12

MOISTURE EFFECTS ON ANNUAL GRASS WEED CONTROL

The following conditions will result in optimum wild oat control:

1. Adequate soil moisture which occurs under normal rainfall in wheat or barley following a fallow year.
2. Temperatures lower than 85° F for several days prior to application.

Low soil moisture levels, low humidity, and high temperatures prior, during or following application may reduce wild oat and foxtail control provided by Wolverine Herbicide.

Foxtail under drought stress will exhibit rolled leaves ("onion leaf") and should not be sprayed as poor control may result. Apply Wolverine Herbicide when conditions improve.

Broadleaf Weed Chart

Weed species controlled by Wolverine Herbicide:

Weed Species	Scientific name	Weed Size
Bedstraw, catchweed/cleavers *	*Galium aparine*	1 - 4 whorls
Bittercress, small-flowered	*Cardamine parviflora*	1 - 4 leaf
Buckwheat, wild	*Polygonum convolvulus*	1- 6 leaf
Catchfly, nightflowering	*Silene noctiflora*	1 - 4 leaf
Chickweed, common[1*]	*Stellaria media*	1 - 6 leaf
Cocklebur, common	*Xanthium strumarium*	1 - 4 leaf
Cockle, white	*Melandrium noctiflorum*	1 - 6 leaf
Cowcockle	*Vaccaria pyramidata*	1 - 6 leaf
Dandelion (seedling)	*Taraxacum officinale*	3 inch rosette
Fiddleneck, coast *	*Amsinckia intermedia*	1 - 4 leaf
Fiddleneck, tarweed *	*Amsinckia lycopsoides*	1 - 4 leaf
Field pennycress	*Thlaspi arvense*	1 - 8 leaf or 4 inch diameter
Flixweed	*Descurainia sophia*	4 inch diameter
Gromwell, corn *	*Lithospermum arvense*	1 - 6 leaf
Hawksbeard, narrowleaf	*Crepis tectorum*	1 - 4 leaf
Hempnettle, common	*Galeopsis tetrahit*	1 - 6 leaf
Henbit *	*Lamium amplexicaule*	1 - 6 leaf
Horseweed/Marestail[1]	*Conyza canadensis*	1 - 4 leaf
Jacobsladder sp.	*Polemoniaceae*	1 - 4 leaf
Kochia[1*]	*Kochia scoparia*	1- 4 inch
Lambsquarters, common	*Chenopodium album*	1 - 6 leaf
London rocket	*Sisymbrium irio*	1 - 6 leaf
Mallow, common	*Malva neglecta*	1 - 4 leaf
~~Marestail, common[1]~~	~~*Hippuris vulgaris*~~	~~1 - 4 leaf~~
Marshelder	*Iva xanthifolia*	1 - 4 leaf
Mayweed chamomile/dogfennel [1*]	*Anthemis cotula*	2 inch
Mustard, birdsrape/wild turnip	*Brassica rapa*	1- 6 leaf or 4 inch diameter
Mustard, black	*Brassica nigra*	1- 6 leaf or 4 inch diameter
Mustard, blue	*Chorispora tenella*	1- 6 leaf or 4 inch diameter
Mustard, tumble/Jim Hill mustard	*Sisymbrium altissimum*	1- 6 leaf or 4 inch diameter
Mustard, wild	*Sinapis arvensis*	1- 6 leaf or 4 inch diameter
Nightshade, Cutleaf	*Solanum triflorum*	1 - 4 leaf
Nightshade, Eastern black	*Solanum ptycanthum*	1 - 4 leaf
Nightshade, hairy	*Solanum sarrachoides*	1 - 4 leaf
Palmer pigweed/Palmer amaranth	*Amaranthus palmeri*	1 - 6 leaf

7/12

Weed Species	Scientific name	Weed Size
Pennsylvania smartweed	*Polygonum pensylvanicum*	1 - 6 leaf
Pigweed, prostrate	*Amaranthus blitoides*	1 - 6 leaf
Pigweed, redroot	*Amaranthus retroflexus*	1 - 6 leaf
Prickly lettuce/China Lettuce	*Lactuca serriola*	1 - 6 leaf
Radish, wild	*Raphanus raphanistrum*	1- 6 leaf or 4 inch diameter
Ragweed, common	*Ambrosia elatior*	1 - 4 leaf
Ragweed, giant	*Ambrosia trifida*	1 - 4 leaf
Russian thistle[1] *	*Salsola kali*	2 inch
Shepherd's-purse	*Capsella bursa-pastoris*	1- 6 leaf or 4 inch diameter
Smartweed, pale	*Polygonum lapathifolium*	1 - 4 leaf
Sowthistle[1], annual	*Sonchus oleraceus*	1 - 6 leaf
Sowthistle[1], perennial	*Sonchus arvensis*	1 - 6 leaf
Sowthistle,[1] spiny	*Sonchus asper*	1 - 6 leaf
Sunflower[1], annual	*Helianthus annuus*	1 - 6 leaf
Tansymustard	*Descurainia pinnata*	4 inch diameter
Velvetleaf	*Abultilon theophrasti*	1 - 4 leaf
Vol. canola	*Brassica napus*	1- 6 leaf or 4 inch diameter
Vol. soybean	*Glycine max*	1 - 4 trifoliates
Wallflower, bushy	*Erysimum repandum*	4 inch rosette
Waterhemp, tall	*Amaranthus tuberculatos*	1 - 6 leaf
Western salsify	*Tragopogon dubius*	1 - 4 leaf
Wormood, biennial (seedling)	*Artemisia biennis*	2 inch

* In winter cereals, only partial control can be expected.

[1] Includes ALS, phenoxy or glyphosate resistant biotypes

Partial Control	
Bindweed, field	*Convolvulus arvensis*
Canada thistle	*Cirsium arvense*
Catchfly, cone	*Silene conoidea*
Catchfly, conical	*Silene colorata*
Chamomile, false	*Matricaria maritima*
Dandelion (established)	*Taraxacum officinale*
Dock, curly	*Rumex crispus*
Jersalem artichoke	*Helianthus tuberosus*
Knotweed, prostrate	*Polygonum aviculare*
Lanceleaf sage	*Salvia reflexa*
Pepperweed, Virginia	*Lepidium virginicum*
Pineappleweed	*Matricaria matricarioides*
Redstem filaree / Storksbill	*Erodium cirutarium*
Swinecress	*Coronopus sp.*
Vol. flax	*Linum usitatissimum*
Vol. lentils	*Lens culinaris*
Wormwood, absinth	*Artemesia absinthium*

Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas and performance may not be commercially acceptable. Best results are obtained when weeds are treated with Wolverine Herbicide before they reach 4 inches in height. The degree of weed control will vary with weed size, density, coverage and growing conditions.

8/12

TANK MIX INSTRUCTIONS

Compatibility Testing With Tank Mix Partners

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

Tank mixtures For Insect Control

Wolverine Herbicide may be tank mixed with Baythroid® XL, Mustang Max™, or Warrior® insecticides providing proper timing for insect and weed control are the same.

Tank mixtures For Disease Control

Fungicides such as Stratego®, Tilt®, Headline®, mancozeb (Dithane F-45®; Manzate® 75DF; Penncozeb® 75DF), or Topsin® M may be tank mixed with Wolverine Herbicide when timing for application of each tank mix partner is the same for the use site. Do not apply Wolverine Herbicide in tank mixture with tebuconazole.

Tank mix applications of herbicides with fungicides may cause temporary yellowing, leaf burn and or height reduction of the crop. Refer to the specific fungicide label for use directions, application rates, restrictions and a list of diseases controlled.

MIXING INSTRUCTIONS

Wolverine Herbicide must be applied with clean and properly calibrated equipment. Prior to adding Wolverine Herbicide to the spray tank, ensure that the spray tank, filters and nozzles have been thoroughly cleaned. In-line strainers and nozzle screens should be 50 mesh or coarser.

1. Fill the spray tank 1/4 to 1/2 full with clean water then add AMS or UAN and begin agitation or bypass.
2. Add the appropriate rate of Wolverine Herbicide directly to the spray tank. Maintain sufficient agitation during both mixing and application.
3. Add a listed tank mix partner, if desired.
4. Add surfactant if desired.
5. Fill the spray tank with balance of water needed.
6. Continue agitation during Wolverine Herbicide application to ensure uniform spray coverage.

TANK CLEANUP PROCEDURE

1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 gallon of domestic ammonia for every 100 gallons of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
3. Repeat step 2.
4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat step 2.

9/12

SPRAY DRIFT MANAGEMENT

Wolverine Herbicide is not volatile. Damage to sensitive crops can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator and grower.

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator and grower. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All ground application equipment must be properly maintained and calibrated using appropriate carriers.

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

INFORMATION ON DROPLET SIZE:

The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. 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 Temperature Inversions below).

Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver medium spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

CONTROLLING DROPLET SIZE:

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- 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. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH:

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan may further reduce drift without reducing swath width.

APPLICATION HEIGHT:

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

WIND:

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

TEMPERATURE AND HUMIDITY:

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

TEMPERATURE INVERSIONS:

Do not make ground applications into areas of temperature inversions because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

CROP ROTATION GUIDELINES

Wolverine Herbicide breakdown in the soil is due mainly to microbial action. Under adverse conditions such as cold and drought, degradation may be slowed.

- 1 Month: Wheat, Barley, Oats, Rye and Triticale
- 4 Months: Alfalfa*, Millet, Sorghum (grain) and Soybeans
- 9 Months: Canola, Canaryseed, Chickpeas, Corn, Drybeans, Flax, Field peas**, Lentils***, Mustards, Potatoes, Safflower, Sunflowers, and Sugarbeets.

* Thorough tillage prior to planting alfalfa and a minimum of 12 inches of rainfall, overhead, furrow or flood irrigation or any combination of these water sources totaling 12 inches is required between the time following a Wolverine Herbicide application and the time of alfalfa seeding.

** Field peas: 9 months for all states except 18 months in MT.

*** Lentils: 9 months for all states except 18 months in MN, MT, ND and SD.

Where a crop is not specified, conduct a field bioassay as described in "FIELD BIOASSAY" section of this label.

FIELD BIOASSAY

A field bioassay must be conducted for crops not listed on this label. To conduct a field bioassay, plant strips of the crop you want to grow the season following Wolverine Herbicide application. Monitor the crop for response to Wolverine Herbicide to determine if the crop can be grown safely in previously treated Wolverine Herbicide areas. Do not plant any rotational crops within 30 days following Wolverine Herbicide application.

WEED RESISTANCE

Wolverine Herbicide contains active ingredients which inhibit ACC-ase, photosynthesis and the HPPD enzyme systems. Wolverine Herbicide may be an effective tool in the management of broadleaf weed populations containing resistance to ALS, phenoxy or glyphosate herbicide modes of action. Repeated use of herbicides with the same mode of action allows resistant weeds to spread. To manage the spread of resistant weed populations, use herbicides with different modes of action in tankmixture, rotation, or in conjunction with alternate cultural practices.

PRECAUTIONS FOR USE

- Do not apply to crops undersown with legume species.
- Rainfall within 1 hour may result in reduced weed control.
- Apply to actively growing weeds. Weed control may be reduced when weeds are under stress due to severe weather conditions, drought, very cold temperatures, etc. Weed control may be reduced if the herbicide applications is made under dry, dusty conditions – especially in the wheel track areas. Ground speed for application should not exceed 10 mph.
- Tank mix applications of herbicides with fungicides may cause temporary yellowing, leaf burn and or height reduction of the crop.

RESTRICTIONS FOR USE

- Do not apply more than 1.7 pt/A per season.
- Do not make more than one application of Wolverine Herbicide per season.
- Do not apply Wolverine Herbicide in tank mixture with tebuconazole.
- Do not graze or harvest barley forage within 25 days, harvest barley grain and straw within 57 days after application.
- Do not graze or harvest wheat forage within 25 days, harvest wheat grain and straw within 60 days after application in the states of Minnesota, Montana, North Dakota, and South Dakota, within 70 days after application in other states.

11/12

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

Pesticide storage

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct sunlight. Do not allow prolonged storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).

Pesticide disposal

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container handling

Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Rigid containers (greater than 5 gallons or 50 lb)

Non-refillable Containers

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior port ions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Refillable Containers

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

12/12

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

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 Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. NO AGENT OF BAYER CROPSCIENCE IS AUTHORIZED TO MAKE ANY WARRANTIES BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

Warning: This product contains a chemical known to the State of California to cause developmental harm.

Net Contents:

Produced for

Bayer CropScience

Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

Wolverine Herbicide (PENDING) 11/28/12, 12/10/12