HERBICIDE

®

YANDA

ACTIVE INGREDIENTS: Sulfentrazone* Imazethapyr*		% BY WT. 33.33% 6.67%
OTHER INGREDIENTS:		<u>60.00%</u>
TOTAL: *VANDAL IMI Herbicide contains 4 pounds of active in 0.67 pounds a.i. of imazethapyr)		

KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la étiqueta, busque a alquien 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.)

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

122115R111716A

EPA Reg. No. 89168-49-89391



Distributed By: INNVICTIS® CROP CARE, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538

FIRST AID

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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 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 eye. Call a poison control center or doctor for treatment advice.

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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Caution

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, socks, shoes and gloves.

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

USER SAFETY RECOMMENDATIONS

Users should:

- . Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove PPE immediately after handling the 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 marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

Groundwater Advisory: This chemical is known to leach through soil into groundwater 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 groundwater contamination.

Do not use on coarse soils classified as sand which have less than 1 % organic matter.

Surface Water Advisory: Sulfentrazone can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters waters in the vegetated filter strips, and areas overlying the drainage systems that drain to surface water.

Physical/Chemical Hazards - Do not use or store near open flame. Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

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 partiating 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls over long-sleeved shirt and long pants, chemical resistant gloves, and shoes plus socks.

RESISTANCE MANAGEMENT

Some weeds are known to develop resistance to herbicides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore herbicides should be used in conjunction with resistance management strategies in the area. Consult the local or State agricultural advisors for details. If weed resistance should develop in the area, this product used alone may not continue to provide sufficient levels of weed control. It the reduced levels of control cannot be attributed to improper application timing, unfavorable weather conditions or abnormally high weed pressure, a resistant strain may have developed.

To reduce the potential for weed esistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the labeled rates and in accordance with the use directions. Do not use less than label rates alone or in tank mixtures. Do not use reduced rates of the tank mix partner. For optimum performance, scout fields carefully and begin applications when weeds are smaller rather than larger. If resistance is suspected, contact the local or State agricultural advisors.

DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

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



PRODUCT INFORMATION

VANDAL IMI is a soluble concentrate formulation. VANDAL IMI is to be mixed with water, liquid fertilizer, or mixtures of water and liquid fertilizer and sprayed for selective preemergence or preplant incorporated weed control.

When applied according to the instructions on this label, VANDAL IMI will control listed broadleaf and sedge weeds and provide grass suppression.

The mode of action of VANDAL IMI herbicide involves uptake by weed roots and shoots. Preemergence and preplant incorporated applications of VANDAL IMI herbicide require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation required for activation following application depends on existing soil molisture, organic matter content and soil texture. VANDAL IMI must be activated by 0.5 to 1.0 inch of rainfall or irrigation required for activation following application depends on existing soil molisture, organic matter content and soil texture. VANDAL IMI must be activated by 0.5 to 1.0 inch of rainfall or irrigation water or eraitic weed control will result. If adequate molisture (1/2" to 1"), is not received days after the VANDAL IMI treatment, a shallow cultivation may be needed to aid in activation to obtain desired weed control. When sufficient moisture is received after dry conditions. VANDAL IMI herbicide will provide control of susceptible germinating weeds. Soil applications of VANDAL IMI treatment, as the advected, injury may occur if seeds are germinating or if they are located near the soil surface (racking).

VANDAL IMI herbicide exhibits excellent crop safety. Poor growing conditions, such as excessive moisture, cool temperatures, and soil compaction or the presence of various pathogens may impact seedling vigor. Under these conditions, the active ingredients in VANDAL IMI, like other soil-applied herbicides, can contribute to cob response. However, these early symptoms are short-lived.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Observe the most restrictive of all instructions, crop restrictions, mixing directions, application precautions, replanting directions, rotational crop quidelines and other label information of each product when tank mixing with VAMOAL IM.

Proper Handling Instructions

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/ loading areas.

Operations that involve mixing, loading rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may hall on the pad. Such a pad shall be designed and flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to fabilitate material removal. An untoplet pad shall be of sufficient capacity to contain at minimum 110% of the capacity of the largest pesticide container or application equipment to the pad. Such as a shall be of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacity of on capacities of ontaing pesticide shall be different adjusted store as and operational containment.

Do not apply this product through any type of irrigation system. Do not use flood irrigation to apply or incorporate this product.

This product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

CROP ROTATIONAL INTERVALS

Shown below are the minimum intervals in months from the time of VAWDAL IMI application until VANDAL IMI treated soil may be replanted with the crops listed. When VANDAL IMI is tank mixed with other herbicide(s), refer to all those labels for re-cropping instructions, following the intervals that are the most restrictive. For crops not listed, the interval is 30 months in addition to a successful field bioassay.

CROP	INTERVAL (Months)
Alfalfa	12
Barley	9 1/2
	40 (18 for the states of AL, DE, FL, GA, IN, KY, MD, NJ, NC, PA, SC, VA)
	40 with bioassay**
	10
Corn, field	10, 4***
	10
	18, 10 ²
	18, 10 ²
Cotton	18
	Anytime
	Anytime
	26
	18
	4
	18
	10
	26
	40
	4 (18 for the states of MN, ND North of Hwv #210)
Safflower	18

CROP	INTERVAL (Months)
Snap Beans	10
Sorghum	18
Soybeans	Anytime
Sugar Beets	40 with bioassay**
Sunflowers	18
Sweet Potatoes	26 (18 for the states of AL, DE, FL, GA, IN, KY, MD, NJ, NC, PA, SC, VA)
Tobacco	9½
Wheat	4

The field bioassay is a test strip of the intended crop planted across the previously treated field and grown to maturity. The test strip should include low spots, knolls, and soil variations such as pH and type. If injury does not occur in the test strip the crop may be planted the following year.

- BR, Clearfield, and IMR corn hybrids may be planted after 4 months where VANDAL IMI was applied at 6 ounces or less
- Hybrid Corn Seed Production, Growers are directed to contact the seed company for information and recommendations regarding the planting of corn grown for seed in field treated with VANDAL IMI the previous year. To the extent consistent with applicable law Innvictis will not accept responsibility for any crowing injury on field core grown for seed following an application of VANDAL IMI.
- Sweet corn (Processed only) and popcorn may be planted after 10 months where VANDAL IMI was applied at 6 oz/A or less.

REPLANTING INSTRUCTIONS

If the initial planting of soybeans fails to produce a uniform stand, soybeans may be replanted in fields treated with VANDAL JMI alone. When tank mixing with a labeled product, refer to the replant instructions for that product.

Do not replant treated fields with any crop at intervals that are inconsistent with the CROP ROTATION INTERVALS on the VANDAL IMI label. Where a tank mix is used, refer to the product's labels for any additional replant instructions.

MIXING AND LOADING INSTRUCTIONS VANDAL IMI Applied Alone

Select the proper labeled application rate of VANDAL IMI from the appropriate crop section, Fill the spray tank with approximately one-half of the volume of water needed for the acreage being treated. With agitator operating, add the required amount of VANDAL IMI for acreage being treated. Allow the product to fully disperse. Complete the addition of spray water. Maintain agitation during filling, mixing and application, Apply the VANDAL IMI spray mixture immediately after mixing.

VANDAL IMI Applied in Tank Mix Combination

Select the proper labeled application rate of VANDAL IMI from the appropriate crop section. Read and follow all applicable use directions, precautions and restrictions on the respective tank mix product labels. To ensure product compatibility, conduct a jar test before large volume mixing. Provided the jar test indicates the mixture is compatible, prepare the tank mixture as follows. Fill the spray tank with approximately one-half of the volume of water veeded for the acreage being treated. With agitator volume and the required amount of VANDAL IMI for the acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Next, add the amount(s) of the additional tank mix product(s) in the to build use of open in the balance of the balance of the balance balance balance of the balance immediately after mixing.

Fertilizer Spray Mixtures

Applications of VANDAL IMI alone, or with recommended tank mixtures, in conjunction with fertilizer solutions may be used unless use directions specifically state otherwise. Small quantities should be tested for compatibility by the following procedure before mixing in full spray tank quantities.

- Add 1 pint of fertilizer solution in a quart jar. Add the appropriate amount of herbicide based on the table below. If more than one product is to be used, add each separately using the following sequence: dry formulations (e.g., wettable powders, dry flowables) first, liquid suspensions (e.g., flowables) next and finally liquids (e.g., EC's).

MIXTURE COMPATIBILITY TESTING

Herbicide Type	Herbicide Field Use Rate	Amount Herbicide Added Per Pint
Wettable Powder or Dry Flowable	0.5 pounds	0.75 teaspoons
	1.0 pounds	1.5 teaspoons
	2.0 pounds	3.0 teaspoons
	3.0 pounds	4.5 teaspoons
Emulsifiable Concentrates	1.0 Pint	0.5 teaspoons
Liquid Flowables	1.0 Quarts	1.0 teaspoons
	2.0 Quarts	2.0 teaspoons
	3.0 Quarts	3.0 teaspoons

Based on a spray volume of 25 cal, per acre. For lower or higher spray volumes, adjust fluid fertilizer quantity accordingly.

Close jar and shake well. 3)

Watch mixture for several seconds, again after 5 minutes and again after 30 minutes. If herbicide/fertilizer combination remains mixed or can be remixed readily (i.e., does not ā١ permanently separate, form, gel or become lumply, the mixture is compatible and can be mixed in full volumes and sprayed. If the mixture is compatible, preparate, for the mixture is compared. If the mixture is compatible, preparate, for the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is the mixture is compared. If the mixture is compared is t fertilizer solution to the tank first, then follow directions noted below. VANDAL IMI Applied Alone with Liquid Fertilizer

When adding VaNDALIMI to a liquid fertilizer carrier, VANDAL IMI should be premixed in clear water. Fill the spray tank one-half full with fertilizer solution. With agitator operating, add the VANDAL IMI slurry to the spray tank. Use a minimum of one gallon of water for each container of VANDAL IMI. Stir until completely dissolved. Then add slurry to the spray tank through a 20-35 mesh screen. Rinse container used for pre-mixing and add rinsate to the spray tank. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use VANDAL IMI spray mixture immediately after mixing.

VANDAL IMI Applied in Tank Mix Combinations

Fill the spray tank one-half full with fertilizer solution. With the agitator operating, add a premix of VANDAL IMI as described in the preceding paragraph. Next, dilute the individual tank mix partners with sufficient water to form a free flowing mixture; then add to the spray tank of fertilizer. While maintaining agitation, add the other products using the following order: slurry of dry formulations (wettable powders, dry flowables) first, diluted liquid formulations (EC's, flowables) second. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use VANDAL IMI tank mixtures immediately after mixing.

APPLICATION INFORMATION Ground Application

Use a conventional low pressure herbicide boom sprayer equipped with suitable nozzles and screens. Apply uniformly using properly calibrated nozzles (10 to 40 ps)) and screens and strainers no finer than 50 mesh. Use 10 to 40 gallons of spray solution per acre. Do not exceed 40 psi spray pressure unless required by the spray nozzle manufacturer. Water or liquid fertilizer solutions may be used as the carrier for VANDAL IMI when applied alone or in tank mixtures with other registered soybean herbicides. A jar test is recommended to determine the compatibility of VANDAL IMI and the fertilizer solution.

Apply VANDAL IMI spray mixture immediately after mixing. Continuous acitation is required until all spray mixture has been applied. Avoid swath overlaps, Shut off spray booms while turning, slowing or stopping, as over application may result. VANDAL IMI spray mixtures should not be allowed to sit overnight as settling of product and difficulty of re-suscending may occur. To avoid injury to sensitive crops, spray equipment used for VANDAL IMI applications must be drained and thoroughly cleared with water plus ammonia before being used to apply other products. See Spray Clean-out Section 21 on page 5.

Avoid all direct, and/or indirect spray contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.

Aerial Application

VANDAL IMI may be applied by air using properly calibrated nozzle types and arrangements that will provide optimum coverage while producing minimal amounts of fine droplets. Apply sufficient spray volume to achieve adequate coverage. Apply a minimum of five (5) gallons of finished spray per acre. Do not apply when wind speed favors drift beyond the area intended for treatment

RUNOFF AND WIND EROSION PRECAUTIONS

- Do not apply under conditions which favor runoff or wind erosion of soil containing VANDAL IMI to non-target areas
- To prevent off-site movement due to runoff or wind erosion: ٠
- ٠ Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, allow the soil surface to be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground
- ٠ Do not apply to soils when saturated with water.
- . Do not use tail water from the first flood or furrow irrigation of treated fields to treat non target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation. SPRAY DRIFT REDUCTION ADVISORY

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE 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.

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

Where States and local govern requirements have one stringent regulations, they must be observed. Droplet Stee Information Where States and local governments have more stringent regulations, they must be observed. Droplet Stee Information Reduce drift potential by applying large droplets. The optimum drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift when applications are made improperly, or under unforward environmental conditions (See Wind, Temperature and Humidity and Temperature Inversions).

VMD - VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or smaller.

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually 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.

higher now rate hozzes instead of increasing pressure. Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage. 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. Application Height - Making applications at the lowest height practical reduces exposure of spray droplets to evaporation and wind movement. Swath Adjustment - Swath adjustment distance must increase with increasing drift potential (higher wind, smaller droplets, etc.) Wind - Onit potentials are lowest between wind speeds of 3 to 10 mes per hour. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications in wind conditions outside of this range could increase the risk of off-target effects and should be avoided. Note that local terrain can influence wind patterns. Every monitoring reductions in wind conditions outside outpring and bus the utified room drift to reduce the risk of off-target effects and should be avoided. Note that local terrain can influence wind patterns. Every monitoring reduction bus the utified to reduct or the room drift. applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity - When making applications in conditions of 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.

Temperature Inversions - Do not apply VANDAL IMI during temperature inversions because the 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 intersional discussional and the second seco

Sensitive Areas - Applications should be made when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

SPRAY EQUIPMENT CLEANOUT

After spraving VANDAL IMI and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure.

- 1. Drain soraver tank, hoses, and sorav boom and thoroughly rinse the inside of the soraver tank with clean water to remove sediment and residues. Thoroughly flush spraver hoses. boom and nozzles with clean water.
- Fill the tank 1/2 full with clean water, and add appropriate tank mix cleaner or ammonia (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom, and nozzles.
- 3. Convenient and through cleaning of the sprayer can be achieved if the cleaning solution is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.

- 4. Before using the sprayer, drain the spray system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately with the tank mix cleaner or ammonia solution.

with the tank mix cleaner or ammonia solution. 5. Property dispose of all cleaning solution and rinsate in accordance with Federal, State and local regulations and guidelines. Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops. Should small quantities of *WADDL IM* remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. Innvictis accepts no liability for any effects due to inadequately cleaned equipment.

WEEDS CONTROLLED When used as directed. VANDAL IMI will provide control or suppression of the following broadleaf weeds and grasses.

Common Name	Scientific Name
Broadleaves	
Amaranth, Palmer	Amaranthus, Palmer
Amaranth spiny	Amaranthus, spinosus
Amaranth spleen	Amaranthus dubius
Anoda spurred	Anoda cristata
Beggarweed, Florida	Desmondiom tortuosum
Carpetweed	Mullugo verticillata
Catchweed Bedstraw	Galium aparine
Cocklebur common ¹	Xanthium Pensylvanicum
Copperleaf, Hophornbeam	Acalypha ostryeafolia
Copperleaf Virginia	Acalypa virginica
Daisy, American	Eclípta alba
Eclipta	Eclipta prostrata
Galinsoga, hairy	Galinsoga ciliata
Golden Crownbeard	Verbesina encelioides
Groundcherry clammy (seedling)	Rhysalis heterophylla
Groundcherry cutleaf	Physalis angulata
Jimsonweed	Datura stramonium
Kochia	Kochia scoparia
Ladysthumb	Polygonum persicaria
Lambsquarters common	Chenopodium album
Marshelder	Iva xanthifolía
Morningglory, entireleaf	Ipomea hederacea integriusc
Morningglory, ivyleaf	Ipomea hederacea hederacea
Morningglory, palmleaf	Ipomea Wrightii
Morningglory, pitted	Ipomea lacunose
Morningglory, purple	Ipomea turbinata
Morningglory, red	Ipomea coccinea
Morningglory, scarlet	Ipomea hederifolia
Morningglory, smallflower	Jacquemontia tamnifolia
Morningglory, tall	Ipomea purpurea
Mustard, black	Brassica nigra
Mustard Tumble	Sisymbrium altissimum
Mustard, wild	Brassica kaber
Nightshade, black	Solanum nigrum
Nightshade, Eastern black	Solanum americanum
Nightshade hairy	Solanum sarrachoides
Pigweed, redroot	Amaranthus retroflexus
Pigweed smooth	Amaranthus hybridus
Poinsettia, wild	Euphorbia heterophylla
Poorjoe	Diodia teres
Purslane, common	Portulaca oleracea
Pusley, Florida	Richardia scabra
Redmaids, Rockpurslane	Calandrinia ciliate

Common Name	Scientific Name
Broadleaves	
Redstem Filaree	Erodium cicutarium
Redweed	Melochia corchorifolia
Senna, coffee	Cassia occidentialis
Shepherdspurse	Capsella bursa pastoris
Sida, prickly (Teaweed)	Sida spinose
Sida, southern	Sida acuta
Smartweed, PA	Polygonum pensylvanicum
Spurge, prostrate	Euphorbia humistrata
Spurge, spotted	Euphorbia maculate
Starbur, bristly	Acanthospermum hispidum
Thistle, Russian	Salsola kali
Velvetleaf	Abutilon theophrasti
Venice Mallow	Hibiscus trionium
Waterhemp, common	Amaranthus rudis
Waterhemp, tall	Amaranthus tuberculatos
Wild Buckwheat	Polygonum convolvulus
0	
Common Name	Scientific Name
Grasses (suppression only) Tank mixing with grass soil applied herbicides, postemergence grass herbicides,	a markeniaal authinstice will be required for complete wass control
Foxtail bristly	Setaria verticillata
Foxtail giant	Setaria faberi
Foxtail grant	Setaria viridis
Foxtail yellow	Setaria lutescens
Johnsongrass seedling ¹	Sorghum halapense
Shattercane	Sorghum bicolor
Fall Panicum ¹	Panicum dichotomiflorum
r un r uniouni	
Common Name	Scientific Name
Sedges	
Nutsedge purple	Cyperus rotundus
Nutsedge yellow	Cyperus esculentus
Sedge, annual	Cares spp.

1 Will not control ALS resistant biotypes of these weed species

SOYBEANS

TIMING AND METHOD OF APPLICATION

WANDAL IMI may be applied alone or in tank mixture combinations for the control of the weeds listed in conventional or GMO soybean varieties. (Roundup-Ready, Liberty-Link, or other

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VANDAL IMI USE RATES - For All Sovbeans

VANDAL IMI Use Rate Table Spring Preplant, Preemergence and PPI Applications						
Fluid ounces VANDAL IMI per acre						
% Organic Matter*		Soil Texture				
	Coarse*	Medium	Fine			
>1.0-2.0	6.0 - 8.0	8.0 - 10.0	10.0 - 12.0			
2.0 - 4.0+ 8.0 - 10.0 10.0 - 12.0 12.0						
Refer to the following chart for information	Refer to the following chart for information on soil type under the COARSE, MEDIUM, and FINE categories.					

Use higher rates for soils of pH less than 7.0 and the lowest rate for pH greater than 7.0 within the rate range. * Do not use on coarse soils classified as sand, which have less than 1 % organic matter.

SOIL CLASSIFICATION CHART

COARSE SOILS	MEDIUM SOILS	FINE SOILS
Sand	Sandy clay loam	Silty clay loam
Loamy sand	Sandy clay	Silty clay
Sandy loam	Loam	Clay loam
	Silt loam	Clay
	Silt	

Spring Preplant Applications For applications of VANDAL IMI greater than 30 days preplant use the highest application rate for the appropriate soil texture and organic matter. Preemergence Applications

VANDAL IMI may be applied at planting time or within 3 days after planting, but before seed germination. VANDAL IMI may be applied alone of in tank mix combinations with other registered soybean herbicides. When applied in tank mix combinations, follow applicable use directions, including application rates, precautions and restrictions of each product in the mixture. Properly closed seed furrows are necessary before applications.

Preplant Incorporated Applications

VANDAL IMI may be applied alone or in tank mix combinations with other herbicides registered for PPI application on soverans. For oreplant incorporated applications, incorporation must be uniform and no deeper than 2 inches. Improper soil incorporation may result in erratic weed control and/or crop injury. When VANDAL IMI is applied in tank mix combination with other soybean herbicides, follow the incorporation directions for the tank mix partner(s). Follow applicable use instructions of each product used in the tank mixture.

Fall Applications: VANDAL IMI may be applied as a fall treatment to the stubble of harvested crops for the burndown of existing vegetation and preemergence control of labeled weeds the Tail applications which imming be applied as a fail beaming of the server of the serve making call by call by the bound of the point of the opinication in the MODAL MI application in the MODAL MI application in the MODAL MI application in the opinication and the model of th

appropriate GMO sovbean varieties. Follow all VANDAL IMI application directions.

Apply before planting, at planting time or prior to seed germination. Properly closed seed furrows are necessary when applying at planting time or before seed germination. Recommended postemergence treatments may include any product or combination of products labeled for such use.

Table 2:

REDUCED BATE APPLICATIONS

VANDAL IMIUse Rate Table for Reduced Rates Fall, Preplant, and Preemergence Applications					
Broadcast Rate Fluid ounces VANDAL IMI per acre					
Broaucast Rate	Soil Texture				
% Organic Matter*	Coarse*	Coarse* Medium Fine			
<1.0-2.0	4.0	4.0 - 5.0	5.0 - 6.0		
2.0-4.0+ 4.0-5.0 5.0-6.0 6.0					
Refer to the following chart for information or	soil type under the COARSE MEDIUM and EIN	E categories			

Use higher rates for soils of pH less than 7.0 and the lowest rate for pH greater than 7.0 within the rate range.

* Do not use on coarse soils classified as sand, which have less than 1 % organic matter.

Preplant Weed Suppression for GMO Soybeans (Roundup Ready, Liberty-Link, or other glyphosate and/or glufosinate-tolerant varieties): Apply VANDAL IMI alone or in a tank mixture with other registered, soil applied soybean herbolices, to redue competition from weeds when followed by a planned postemergence application(s). Apply before planting, at plant or within 3 days after planting. Property closed seed for urrow is necessary to avoid orolegial crop response when applying at plant or after planting. Recommended postemergence treatments include So day after plantage index of plantage sector have been and sector and secto

Note: VANDAL IMI is not for use after crop has emerged. Precautions

Properly closed seed furrows are necessary when applying at planting time of before seed germination. The use directions are based on the interactive effects of VANDAL IMI and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among rcops. The user is required to observe the instructions and recommendations presented under General Application Information, Soybean Application use directions, Product Use Rates, Rotational Guidelines, Weeds Controlled and other sections of this label pertinent to the anticipated use. It is important to note that not all cultivars have been tested with VANDAL IM/. Consult University or Extension specialists for additional information on specific local varieties and any other pertinent local information.

Restrictions

- Do not apply this product through any type of irrigation system.
- Do not apply more than 12.0 fluid ounces (0.375 pounds active ingredient) of VANDAL IMI per acre per 12 (twelve) month period. This period is considered to begin with the initial sulfentrazone application.
- Do not apply to frozen soils.
- Do not feed treated soybean forage, soybean hay or soybean straw to livestock. .
- Do not apply VANDAL IMI to soils classified as sand containing less than 1% organic matter. .
- Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops. Do not incorporate deeper than 2 inches. ٠ .
- If sovbears are furrow invaried, till the soil prior to planting winter wheat or barley. The beds should be broken up and the soil mixed with tillage equipment set to operate four (4) to six (6) inchés deep.

DRY PEAS

Chickpeas (garbanzo beans), dry edible peas, English and southern peas.

For use in the states east of and including: ND, SD, WY, CO, and NM (except the states east of and including VT, MA, and CT). VANDAL IMI can be used on dry edible peas, and chickpeas in ID, MT, NV, OR, UT, and WA.

VANDAL IMI can be used on chickpeas in AZ.

Table 3-

VANDAL IMI Use Rate (Dry Peas) Fall or Spring Farly Preplant, Preemergence, and Preplant Incorporated Applications

Broadcast Rate	Fluid ounces VANDAL IMI per acre				
% Organic Matter	Soil Texture				
% Organic Matter	Coarse	Medium	Fine		
<1.5%	2.75 - 3.6	3.6 - 5.4	3.6 - 5.4		
1.5 - 3%	3.6 - 5.4	4.5 - 6.0	6.0		
>3%	4.5 - 6.0	6.0	6.0		

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories

Use higher rates for soils of pH less than 7.0 and the lowest rate for pH greater than 7.0 within the rate range.

Early Preplant and Fall Applications:

VANDAL IMI may be applied in the fall as a preplant treatment to control or suppress weeds prior to planting the following spring. VANDAL IMI should be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil. Do not mechanically incorporate in the fall of spring as this can destroy the herbicide barrier and weed escapes can occur. Do not apply to frozen soils or to existing snow cover to prevent VANDAL IMI runoff from rain or snow melt that may occur following application. VANDAL IMI may be tank mixed call obtained by the history of the second of the second provide s

Early Preplant and Preemergence (Spring Applications) VANDAL IMI may be applied preplant on the soil surface in the spring to control weeds in dry peas.

VANDAL IMI can be applied early preplant prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed. VANDAL IMI can be tank mixed with other preemerge herbicides labeled for dry peas use. If dry conditions persist following preemerge application of VANDAL IMI, a shallow incorporation may be needed to incorporate and activate the herbicide. If weeds are emerged at the time of VANDAL IMI application, use a burndown herbicide at the full-labeled rate in combination with VANDAL IMI or sequential application as needed.

Preplant Incorporated (PPI)

VANDAL IMI may be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage dry pea. Do not incorporate to depths greater than 2 inches, VANDAL IMI use rates for PPI applications are similar to those used in preplant and preemergence applications, VANDAL IMI can be tank mixed with other soil-applied herbicides Indicate the second sec

Weeds Controlled

When applied according to directions, VANDAL IMI will provide control of Kochia (ALS and Triazine Resistant)

Lambsguarters common Nightshade, Fastern black Piaweed red root Pigweed smooth

Precautions

When applying VANDAL IMI to coarse textured soils, it is recommended that growers allow a minimum of 7-14 days from application to planting to reduce the risk of crop response.

VANDAL IMI must be activated by 0.5 to 1.0 inch of rainfall or irritation water or erratic weed control will result. If adequate moisture (1/2" to 1") is not received within 7 to 10 days after the VANDAL IMI treatment, a shallow cultivation may be needed to aid in activation to obtain desired weed control. When sufficient moisture is received after dry conditions, VANDAL IMI herbicide will provide control of susceptible germinating weeds. Under extended periods of dry weather, adequate weed control may not be achieved.

Some adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.0 or higher, or on highly eroded soils, hilltops, or in areas of calcareous outcroppings. VANDAL IMI use rates should be reduced to 2.75 oz/A in those areas, or do not use. Inadequate seed furrow closure or shallow planting (less than 1.0 inch) may result in undesirable crop response. As expected, poor growing conditions such as excessive moisture, low temperatures, soil compaction and diseases may also cause undesirable crop response. These Crop Specific Use directions are based upon the interactive effects of VANDAL IMI and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under General Application Instructions, General VANDAL IMI Product Use Rates, Rotational Crop Guidelines, Reptanting instructions, Weed Controlled and any other section of this label pertinent to the anticipated crop use (Section 12), it is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with VANDAL IMI. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on VANDAL IMI under specific local conditions.

Restrictions

- Do not apply more than 6.0 fluid ounces (0.188 lb a.i.) total per twelve-month period. The twelve-month period is considered to begin upon the initial VANDAL IMI application. ٠
- Do not apply more than one application per year. ٠
- Do not apply after crop emerges, or if the seedling is close to the soil surface. Do not incorporate to depths greater than 2 inches.
- Do not apply to frozen soils or to existing snow cover to prevent VANDAL IMI runoff from rain or snow melt that may occur following application. .
- Do not use on soils classified as sand, which have less than 1 % organic matter. .

PEANUTS

Southeastern United States Only (AL, AR, GA, LA, MS, NC, SC, TN, VA)

Apply VANDAL IMI alone or in combination with other registered herbicides for the control of key grass and broadleaf weeds in peanut production. Refer to the information below for specific use directions. VANDAL IMI is registered for use on peanuts only in the following states: AL, AR, GA, LA, MS, NC, SC, TN and VA.

Application Instructions

VANDAL IMI may be oreplant incorporated (to a depth no greater than 2 inches) up to 14 days prior to planting. Incorporation of VANDAL IMI deeper than 2 inches can result in adverse crop response and/or inconsistent weed control. Alternatively, VANDAL IMI may be applied to the soil surface early preplant, at planting, or within 3 days after planting. Property closed seed for over a required when applying at planting time or before seed ermination. When planting into soil treated carry polant, it WADAL (M/, minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control. Do not use VANDAL IMI for "at-crack" type applications or apply to expose peanut tissue. Such use can result in significant barrier of the soft surface to achieve fraking weed control. Do not use *whork in market* to achieve the achieve fraking in the soft surface to achieve the achieve against many broadleaf and grass weed species. For optimum performance, a combination of *MADAL IM* is assistentiated as the sector sector as a control of the sector assistence and the sector

Table 4.

VANDAL IMI Use Rate (Peanut)

ļ	Early Prepl	lant, l	Preemergence,	and Prep	plant	Incorporat	ed Ap	plicat	ions	

Broadcast Rate	Fluid ounces VANDAL IMI per acre				
% Organic Matter	Soil Texture				
	Coarse	Fine			
<1.5%	2.8 - 3.5	3.5 - 5.5	3.5 - 5.5		
1.5 - 3%	3.5 - 5.5	4.5 - 7.3	5.5 - 7.3		
>3%	4.5 - 7.3	5.5 - 7.3	6.0 - 9.5		

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories

Use higher rates for soils of pH less than 7.0 and the lowest rate for pH greater than 7.0 within the rate range.

Precautions

VAIDAL IM/Is especially effective against a wide range of economic broadleaf and grass weeds. The same processes that VAIDAL IM/Iaffects in these weeds can, under certain conditions, be affected in peanuts. These conditions include high pH (7.0 and above), cool weather, prolonged and excessive molsture, seedling diseases, and any other condition, including poor agronomic practices, that are unfavorable to vigorous crop growth. Such effects in peanuts are often observed as sturing and discoration. The duration of these effects are somewhat agrining practices into and the adverse growing conditions. These effects lessen and generally diminish with a relative to normal growing conditions. There effects lessen and generally diminish with a relative to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions a sonit-material dependent to normal growing conditions. There exists a sonit-material dependent to normal growing conditions a

BROADLEAVES	
Amaranth, Palmer	Amaranthus palmeri
Amaranth, spiny	Amaranthus, spinosus
Amaranth, spleen	Amaranthus dubius
Anoda, spurred	Anoda cristata
Cocklebur, common	Xanthium strumarium
Copperleaf, hophornbeam	Acalypha ostryifolia
Morningglory, Entireleaf	Ipomea hederacea integriusc
Morningglory, lvyleaf	Ipomea hederacea hederacea z
Morningglory, Palmleaf	Ipomea Wrightii
Morningglory, purple	Ipomea turbinate
Morningglory, red	Ipomea coccinea
Morningglory, scarlet	Ipomea hederifolia
Morningglory, tall	lpomea, purpurea
Nightshade, black	Solanum nigrum
Nightshade, Eastern black	Solanum americanum
Pigweed, redroot	Amaranthus retroflexus
Pigweed, smooth	Amaranthus hybridus
Purslane, common	Portulaca oleracea
Side, prickly	Sida spinosa
Smartweed, PA (seedling)	Polygonum pensylvanicum
Spurges, Prostrate	Euphorbia humistrata
Spurges, Spotted	Euphorbia maculata
Waterhemp, common	Amaranthus rudis
Waterhemp, tall	Amaranthus tuberculatos

GRASSES	
Crabgrass, large	Digitaria sanguinalis
Crabgrass, small	
Crabgrass, southern	Digttaria ciliaris
Barnyardgrass	Echinochloa crus-galli
Goosegrass	Eleusine indica
Signalqrass, broadleaf	
Panicum, fall	Panicum dichotomiflorum
Panicum, Texas	Panicum maximum
SEDGES	
Nutsedge, purple	Cyperus rotundus
Nutsedge, yellow	Cyperus esculentus
Sedge, annual	Cares spp.
Postriationa	

Restrictions

Do not apply VANDAL IMI after crop emergence, at cracking, or if the seedling is close to the soil surface, as undesirable crop response may occur. .

Do not apply more than 9.5 fluid ounces per acre of VANDAL IMI per twelve-month period. The twelve-month period is considered to begin upon the initial VANDAL IMI application. ٠

Do not use on soils classified as sand, which have less than 1% organic matter. ٠

Do not apply to frozen soils or existing snow cover to prevent VANDAL IMI runoff from rain or snowmelt that may occur following application .

Do not apply after crop seed germination. Do not irrigate when peanuts are cracking ٠

STORAGE AND DISPOSAL

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

Pesticide storage - Store product in original container only, away from other pesticides, fertilizer, food or feed. Store in a cool dry place and avoid excess heat. Do not store below 32° dearees.

In Case of Spill - Avoid contact. Isolate areas and keep out animals and unprotected persons. To Confine Spills - Dike surrounding area, sweep up spillage, Dispose of in accordance with information given under Pesticitle Disposal. Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and discose of in an approved manner. Place damaged container in a large holding container. Identify contents per required hazardous waste labeling regulations.

Pesticide Disposal - Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency on the Hazardous Waste representative of the nearest EPA Regional Office for guidance. Container Disposal

Nonrefiliable container. Do not reuse or refill this container. Triple finse container (or equivalent) promptly after emptying. Triple rinse as follows: (For containers 5 gallons or less) 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

(For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Empty the rinsate into application equipment or a mix tank or store cinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Containers - Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning 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 clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of INNVICTIS CROP CARE LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold INNVICTIS CROP CARE LLC and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, INNVICTIS CROP CARE LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the stated in the Directorys for Decempton by the initiation for the the bar of the directory initiation of the direct

handling of this product. To the extent consistent with state law, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF INIVICITIS CROP CARE LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISS), BESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF INIVICITIS CROP CARE LLC OR SELLER. THE REPLACEMENT OF THE PRODUCT.

INNVICTIS CROP CARE LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of Sale and Limitation of Warranty and Liability which may not be modified except by written agreement signed by a duly authorized representative of INNVICTIS CROP CARE LLC.

