

HALOSULFURON-METHYL GROUP 2 HERBICIDE THIFENSULFURON-METHYL GROUP 2 HERBICIDE



PERMIT PLUS is a selective herbicide for control of listed broadleaf weeds and nutsedge in field corn, fallow ground, rice (except California) and sulfonylurea-tolerant soybeans.

# WARNING-AVISO

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

	FIRST AID			
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.</li> <li>Call poison control center or doctor for treatment advice.</li> </ul>			
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
IF SWALLOWED	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>			
	HOT LINE NUMBER			

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Medical emergencies involving this product, call toll free 1-888-478-0798.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves made of any waterproof material (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber).

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

# **ENGINEERING CONTROLS STATEMENTS**

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

# **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing/PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**NET CONTENTS: 12x20 oz Case** 



#### **ENVIRONMENTAL HAZARD SECTION OF PRECAUTIONARY STATEMENTS**

#### **GROUNDWATER ADVISORY**

Halosulfuron-methyl is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

#### SURFACE WATER ADVISORY

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. 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 loading of halosulfuron-methyl from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### WINDBLOWN SOIL PARTICLES

PERMIT PLUS has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying PERMIT PLUS if prevailing local conditions may be expected to result in off-site movement.

#### NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow coming in contact with water. Hazardous chemical reaction may occur.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This product must only be used in accordance with the Directions for Use on this label or in separately published Gowan Company Supplemental Labeling.

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

# 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 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
- Shoes plus socks
- Chemical-resistant gloves, such as nitrile rubber, neoprene rubber or polyethylene.

### PRODUCT INFORMATION

PERMIT PLUS is a Water Dispersible Granule (WDG) formulation that selectively controls certain broadleaf weeds and nutsedges in selected crops. PERMIT PLUS is effective both preemergence and postemergence. PERMIT PLUS can be absorbed through roots, shoots and foliage and is translocated within the plant. The level of weed control following PERMIT PLUS application is dependent upon application rate, weed species, size at application time, and growing conditions. Heavy infestations should be treated early before the weeds become too competitive with the crop. Where allowed, sequential applications may be required to control later weed flushes. Soon after PERMIT PLUS is applied, growth of susceptible weeds is inhibited, and susceptible weeds are no longer competitive with the crop. Following growth inhibition, the leaves and growing points begin to discolor. Complete control typically occurs within 7 - 14 days depending on the weed size, species and growing conditions.

#### **WEED RESISTANCE STATEMENT**

PERMIT PLUS contains Group 2 herbicides. Any weed population may contain or develop plants naturally resistant to Group 2 herbicides. Weed species with acquired resistance to Group 2 herbicides may eventually dominate the weed population if Group 2 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by PERMIT PLUS or other Group 2 herbicides.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance consider:

- Avoiding the consecutive use of PERMIT PLUS or other target site of action Group 2 herbicides that have a similar target site of action, on the same weed species.
- Using tank mixtures or premixes with herbicides from different target site of action groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
  - Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
  - Fields should be scouted after application to verify that the treatment was effective.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

For further information or to report suspected resistance, you may contact Gowan Company at 1-800-883-1844.

#### **APPLICATION EQUIPMENT AND INSTRUCTIONS**

Applications may be made by ground or aerial equipment to healthy, actively growing weeds. For best results, avoid applications when weeds are under stress due to weather, disease, insect damage, or combinations of these factors. PERMIT PLUS Herbicide is rainfast after 4 hours; rainfall or irrigation occurring within 4 hours after application may reduce effectiveness.

Thoroughly clean application equipment prior to mixing PERMIT PLUS Herbicide spray solutions, after PERMIT PLUS Herbicide use, and prior to spraying a crop other than those listed on the label. Refer to the "SPRAYER TANK CLEANOUT" section of the label for more detailed information.

#### **Ground Applications**

Apply PERMIT PLUS uniformly with properly calibrated ground equipment in 10 or more gallons of water per acre. Other common carrier solutions may be used for directed applications as long as spray contact with crop foliage is avoided. Select spray volumes that ensure thorough and uniform weed coverage.

#### **Aerial Applications:**

This product is limited to ground application only in the State of New York. Do not apply by air in this state.

Apply this product or approved tank mixtures with properly calibrated equipment in 3 - 15 gallons of water per acre.

#### SPRAY DRIFT

#### Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### Aerial Applications:

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

# **SPRAY DRIFT ADVISORIES:**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

# Importance of droplet size:

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

<u>Controlling Droplet Size - Ground Boom</u>

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

# **Controlling Droplet Size - Aircraft**

 Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

**BOOM HEIGHT - Ground Boom** - Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft - Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS - Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY - When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

**TEMPERATURE INVERSIONS** - Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND - Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# Sensitive areas:

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

#### **MIXING INSTRUCTIONS**

Fill the spray tank with water to about 3/4 of the desired volume and begin agitation. Add the labeled amount of PERMIT PLUS. Add individual formulations to the spray tank in the following sequence:

- 1. Water soluble bags
- 2. Dry flowables
- 3. Emulsifiable concentrates
- 4. Drift control additive
- 5. Water soluble liquids
- Adjuvants (NIS, COC, MSO)

Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Spray solutions should be applied within 24 hours after mixing.

#### **ADJUVANTS**

**Nonionic Surfactant (NIS)** is required in the PERMIT PLUS spray solution. Use an NIS which is approved by EPA for use on food crops and which contains at least 80% active ingredient. Use NIS at 0.25 - 0.5% v/v concentrations (1 - 2 guarts per 100 gallons of spray solution).

**Crop oil concentrate (COC)** can be used with PERMIT PLUS instead of NIS. Do not use both NIS and COC in the spray mixture. Add COC to the spray mixture at 1% v/v concentration (1 gallon per 100 gallons of spray solution). Use only an EPA approved, high quality petroleum or vegetable based COC which contains at least 14% emulsifiers. Refer to the specific crop use direction and restrictions before adding COC adjuvants to the spray mixture.

**Methylated Seed Oils (MSO)** and MSO based adjuvants can be used with PERMIT PLUS instead of NIS. Do not use both NIS and MSO in the spray mixture. Add MSO to the spray mixture at 1% v/v concentration (1 gallon per 100 gallon of spray solution). Use only an EPA approved high quality MSO. Refer to the specific crop use direction and restrictions before adding MSO or MSO based adjuvants to the spray mixture.

**Nitrogen fertilizer** may be added to the spray solution for postemergent applications to improve the control of certain species. Apply a high quality, granular spray grade ammonium sulfate (AMS) at a rate of 2 - 4 lb/A Use of liquid AMS solution is allowed as long as the use rate selected equates to the amount of actual nitrogen applied in 2 - 4 lb of granular AMS. Another option would be to use liquid nitrogen fertilizer solution (e.g. 28-0-0) at a rate of 2 - 4 qt/A Do not use liquid nitrogen fertilizer solutions or suspensions as the total carrier for postemergence applications or excessive crop injury may occur.

#### **TANK MIXES**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Unless stated in the "Application Instructions" section or allowed by supplemental labeling, tank mix combinations have not been evaluated and are the user's responsibility. Refer to the companion product label for use instructions, additive requirements, weeds controlled, the size range of weeds that should be treated, and application restrictions. It is recommended that tank mixtures should be evaluated for miscibility and crop safety on a small test area prior to use. Tank mixtures should not be applied when the plants are under stress due to drought, water saturated soils, low fertility (especially low nitrogen levels) or other poor growing conditions.

#### SPRAYER TANK CLEANOUT

To avoid injury to desirable crops, clean all mixing and spray equipment before and immediately following applications of PERMIT PLUS as follows:

- 1. Drain tank; thoroughly rinse spray tank, boom, and hoses with clean water. Remove the nozzles and screens and clean separately in a bucket containing agent and water. Loosen and physically remove any visible deposits.
- 2. Fill the tank with clean water and 1 gallon of household ammonia\* (containing 3% ammonia) for every 100 gallons of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom, and nozzles with the cleaning solution and then drain the tank.
- 3. Remove the nozzles and screens and clean separately in a bucket containing agent and water.
- 4. Repeat step 2.
- 5. Rinse the tank, boom, and hoses with clean water.
- 6. The rinsate may be disposed of on-site or at an approved disposal facility.
- \* Equivalent amount of an alternate strength ammonia solution can be used in the clean out procedure. Carefully read and follow the individual cleaner instructions.

#### **USE PRECAUTIONS**

- Excessive amounts of water (greater than 1 inch) from rainfall or sprinkler irrigation soon after a preemergent application may cause crop injury. This potential injury can be enhanced if seeding depth is too shallow.
- Within 4 hours of a PERMIT PLUS Herbicide application, avoid using overhead sprinkler irrigations or making applications when conditions favor rainfall.
- PERMIT PLUS can cause injury or crop failure under cool and wet growing conditions that delay early seedling emergence, vigor or growth. Be especially cautious during the first planting of the season when these conditions are likely to occur.
- PERMIT PLUS may be applied to labeled crops (including cultivars and/or hybrids of these) and used according to labeled directions. Not all
  hybrids/varieties have been tested for sensitivity to PERMIT PLUS. For untested varieties, a small amount of the field should be sprayed to determine
  potential sensitivity to its use.
- Thoroughly clean application equipment immediately after PERMIT PLUS use and prior to spraying another crop.
- Temporary yellowing or stunting of the crop may occur following PERMIT PLUS applications.
- Under certain environmental conditions, PERMIT PLUS applied over-the-top of a blooming crop may result in some bloom loss.

#### **USE RESTRICTIONS**

- Do not apply PERMIT PLUS using air assisted (air blast) field crop sprayers.
- Do not apply this product through any type of irrigation system.
- Do not apply PERMIT PLUS if the crop or target weeds are under stress due to drought, water saturated soils, low fertility (especially low nitrogen levels) or other poor growing conditions.
- Do not apply within 7 days before or after an organophosphate application. Use of soil or foliar applied systemic organophosphate insecticides on PERMIT PLUS treated crops may increase the potential for crop injury and/or the severity of the crop injury.

# FOR OPTIMUM RESULTS

The level of weed control following PERMIT PLUS application is dependent upon application rate, method, weed species, size and infestation intensity at application time, and growing conditions. Soon after PERMIT PLUS is applied, growth of susceptible weeds is inhibited, and they are no longer competitive with the crop. Following growth inhibition, the leaves and growing point begin to discolor. Complete control typically occurs within 7 - 14 days depending on the weed size, species and growing conditions.

# • Follow mixing instructions regarding adjuvants.

#### · For preemergence applications:

- If susceptible weeds are present prior to crop emergence, use a surfactant as directed in the "Adjuvants" section.
- Activating soil moisture is necessary for optimum preemergent weed control.
- Preemergent weed control may be improved by incorporating PERMIT PLUS with irrigation (1/4 1/2 inch maximum).
- Preemergence applications of PERMIT PLUS when weed coverage prevents contact with the soil will result in reduced or no residual
  activity.

# For postemergence applications:

- Treat young actively growing broadleaf weeds 1 3 inches in height. Larger weeds may not be adequately controlled.
- Treat actively growing nutsedge plants at the 3 5 leaf stage.
- Wait to overhead sprinkler irrigate for 2 3 days after a postemergence application.
- Avoid applications when weeds are under drought, stress, disease, or insect damage.
- Use of PERMIT PLUS without an adjuvant can result in reduced efficacy.

# WEEDS CONTROLLED BY PERMIT PLUS ALONE

C = Control, S = Suppression, NA = No Activity

WEED SPECIES	SCIENTIFIC NAME	PREEMERGENT	POSTEMERGENT	WEED HEIGHT (IN)	WEED HEIGHT (IN)
		ACTIVITY	ACTIVITY	3/4 OZ/ACRE	1 to 1 1/2 OZ/ACRE
Alligator weed	Alternanthera philoxeroides	NA	S	1 to 2	1 to 6
Amaranth, spiny <sup>2</sup>	Amaranthus spinosus	C <sup>2</sup>	C <sup>2</sup>	1 to 3	1 to 6
Barnyardgrass	Echinochloa crusgalli	S	NA		
Bindweed	Calystegia sepium	NA	S	1 to 2	1 to 4
Burcucumber	Sicyos angulatus	NA	S	1 to 3	1 to 12
California arrowhead <sup>3</sup>	Sagittaria montevidensis	NA	C <sub>3</sub>	1 to 2	1 to 4
Chickweed, common	Stellaria media	С	NA		
Cocklebur, common	Xanthium strumarium	С	С	1 to 9	1 to 14
Corn spurry	Spergula arvensis	С	С	1 to 2	1 to 4
Cutleaf groundcherry	Physalis angulata	С	С	1 to 3	1 to 4
Dayflower	Commelina spp.	С	S	1 to 2	1 to 4
Dayflower, spreading	Commelina diffusa	С	S	1 to 2	1 to 4
Deadnettle, purple	Lamium purpureum	С	NA		
Devils claw	Proboscidea louisianica	NA	С	1 to 2	1 to 4
Ducksalad	Heteranthera limosa	NA	С	1 to 2	1 to 2
Eclipta	Ecilpta prostrata	С	S	1 to 2	1 to 4
Flatsedge, rice <sup>3</sup>	Cyperus iria	S <sup>3</sup>	C <sup>3</sup>	1 to 9	1 to 12
Fleabane, Philadelphia	Erigeron philadelphicus	NA	С	1 to 3	1 to 3
Galinsoga	Galinsoga spp.	С	С	1 to 2	1 to 4
Galinsoga, hairy	Galinsoga quadriradiata	С	С	1 to 2	1 to 4
Golden crownbeard	Verbesina encelioides	NA	С	1 to 2	1 to 4
Goosefoot	Chenopodium californicum	С	С	1 to 2	1 to 4
Groundsel, common	Senecio vulgaris	С	NA		
Henbit	Lamium amplexicaule	S	NA		
Horseweed/Marestail <sup>2</sup>	Conyza canadensis	C <sup>2</sup>	NA		
Horsetail	Equisetum arvense	NA	S	1 to 2	1 to 4
Jimsonweed	Datura stramonium	С	NA		
Jointvetch	Aeschynomene virginica	NA	С	1 to 2	1 to 4
Kochia <sup>2</sup>	Kochia scoparia	C <sup>2</sup>	S <sup>2</sup>	1 to 3	1 to 6
Ladysthumb	Polygonum persicaria	С	С	1 to 2	1 to 4
Lambsquarter, common	Chenopodium album	С	C <sup>2</sup>		

WEED SPECIES	SCIENTIFIC NAME	PREEMERGENT ACTIVITY	POSTEMERGENT ACTIVITY	WEED HEIGHT (IN) 3/4 OZ/ACRE	WEED HEIGHT (IN) 1 to 1 1/2 OZ/ACRE
Lettuce, prickly	Lactuca serriola	С	NA		
Mallow, common	Malva neglecta	С	NA		
Mallow, Venice	Hibiscus trionum	С	С	1 to 3	1 to 12
Mayweed chamomile (dog fennel)	Anthemis cotula	С	NA		
Milkweed, common	Asclepias syriaca	NA	S	1 to 5	1 to 12
Milkweed, honeyvine	Ampelamus albidus	NA	S	1 to 3	1 to 6
Morningglory, ivyleaf <sup>3</sup>	Ipomoea hederacea	NA	S <sup>3</sup>		1 to 3
Morningglory, tall <sup>3</sup>	Ipomoea purpurea	NA	S <sup>3</sup>		1 to 3
Mustard, wild	Sinapis arvensis	С	С	1 to 3	1 to 6
Nutsedge, yellow <sup>1</sup>	Cyperus esculentus	S	C <sup>1</sup>	3 to 6	3 to 12
Nutsedge, purple <sup>1</sup>	Cyperus rotundus	S	C <sup>1</sup>	3 to 6	3 to 12
Passionflower, maypop	Passiflora incarnata	NA	С	1 to 3	1 to 3
Pennycress, field	Thlaspi arvense	S	S		
Pepperweed, field	Lepidium campestre	S	S		
Pepperweed, Virginia	Lepidium virginicum	S	S		
Pigweed, redroot <sup>2</sup>	Amaranthus retroflexus	C <sup>2</sup>	C <sup>2</sup>	1 to 3	1 to 6
Pigweed, smooth <sup>2</sup>	Amaranthus hybridus	C <sup>2</sup>	C <sup>2</sup>	1 to 3	1 to 6
Plantain	Plantago major	С	NA		
Pokeweed, common	Phytolacca Americana	NA	С	1 to 3	1 to 6
Purslane	Portulaca oleracea	S	NA		
Radish, wild	Raphanus raphanistrum	С	С	1 to 3	1 to 6
Ragweed, common <sup>2</sup>	Ambrosia artemisiifolia	C <sup>2</sup>	C <sup>2</sup>	1 to 9	1 to 12
Ragweed, giant <sup>2</sup>	Ambrosia trifida	NA	C <sup>2</sup>	1 to 3	1 to 6
Redstem <sup>3</sup>	Ammannia auriculata	NA	C <sub>3</sub>	1 to 2	1 to 4
Ricefield Bulrush <sup>2</sup>	Scirpus mucronatus	NA	C <sup>2</sup>	1 to 2	1 to 4
Sesbania, hemp	Sesbania exaltata	S	С	1 to 3	1 to 6
Shepherd's purse	Capsella bursa-pastoris	С	S	1 to 2	1 to 4
Sida, prickly	Sida spinosa	NA	S	1 to 2	1 to 4
Smallflower umbrella sedge <sup>2</sup>	Cyperus difformis	NA	C <sup>2</sup>	1 to 2	1 to 4
Smartweed, Annual	Polygonum spp.	С	С	1 to 6	1 to 9
Smartweed, Pennsylvania	Polygonum pensylvanicum	С	S	1 to 2	1 to 4
Sunflower	Helianthus spp.	С	С	1 to 12	1 to 15
Texasweed	Caperonia palustris	NA	С	1 to 3	1 to 3
Velvetleaf	Abutilon theophrasti	С	С	1 to 9	1 to 12
Willowherb,	Epilobium ciliatum	С	NA		

WEED SPECIES SCIENTIFIC NAME		PREEMERGENT	POSTEMERGENT	WEED HEIGHT (IN)	WEED HEIGHT (IN)
		ACTIVITY	ACTIVITY	3/4 OZ/ACRE	1 to 1 1/2 OZ/ACRE
Yellowcress, creeping	Rorippa sylvestris	С	С	1 to 2	1 to 4

- Heavy infestations of nutsedge may require sequential applications. An earlier treatment may be required to prevent nutsedge from competing with the crop.
   Certain biotypes of this weed species are known to be resistant to ALS herbicides. Where these ALS-resistant biotypes are known to exist, an appropriate registered herbicide, active against the weed and with another mode of action, can be used alone or in tank mixtures with PERMIT PLUS to control these
- 3. Use maximum label rates for best results. In rice fields the addition of MSO and MSO based adjuvants will improve level of control.

# **APPLICATION INSTRUCTIONS** PREHARVEST INTERVAL

	The re	The required days between last application and harvest (PHI) are given in () after each crop name.		
CROP	OZ/ACRE	DIRECTIONS FOR USE		
CORN, FIELD (30)	3/4	PERMIT PLUS Postemergence Field Corn Applications: Apply foliar ground applications of PERMIT PLUS broadcast at 3/4 oz/A on 2-6 leaf corn (1-5 collars) using a minimum of 10 gallons of water per acre. Apply foliar aerial applications of PERMIT PLUS broadcast at 3/4 oz/A on 2 - 6 leaf corn (1 - 5 collars) using a minimum of 3 to 15 gallons of water per acre.		
		Apply PERMIT PLUS to field corn hybrids with a Relative Maturity (RM) of 88 days or more, including "food grade (yellow dent, hard endosperm), waxy and high-oil corn. Not all field corn hybrids of less than 88 days RM, not all white corn hybrids or Hi-Lysine hybrids have been tested for crop safety, nor does Gowan Company have access to all seed company data. Consequently, injury arising from the use of PERMIT PLUS on these types of corn is the responsibility of the user. Consult with your seed supplier before applying PERMIT PLUS to any of these corn types		
		PERMIT PLUS Tank Mixtures in Field Corn:  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 and precautionary language of the products in the mixture.		
		Before mixing in the spray tank, test the compatibility mixing all components in a small container in proportionate quantities.		
		Tank mixtures should not be applied if the crop is under severe stress due to drought, water-saturated soils, poor fertility (especially low nitrogen levels), hail, frost, insects or when the maximum daytime temperature is above 92° F at time of application. Tank mix applications under these conditions may cause temporary crop injury.		
		Ensure that spray equipment is set up to avoid applying an excessive rate directly over the rows and into the whorl of the cornstalk. To insure good spray coverage of weeds and to reduce the risk of spraying directly into the whorl, tank mix applications made after corn is 24 inches tall should be directed or semi-directed using drop nozzles.  PERMIT PLUS Tank Mixture Options in Field Corn:		
		Tank mixtures for additional broadleaf weed control, including but not limited to 2,4-D, Armezon®, atrazine, Buctril®, Callisto®, dicamba, Impact®, or Laudis® can be added.		
		Tank mixtures for post emerge grass control, including but not limited to Accent®, Beacon®, Option® or Steadfast® can be added.		
		Tank mixtures for additional post emerge grass and broadleaf control, including but not limited to Roundup® brands, glyphosate (glyphosate-tolerant corn only), Ignite® and Liberty® (LibertyLink® hybrids only) can be added.  PERMIT PLUS and SOIL RESIDUALS in emerged corn:		
		Alachlor, acetochlor, metolachlor and dimethenamid can be tank mixed with PERMIT PLUS for residual control of foxtails and other grass weeds in field corn.		
	PRECAUTIO	NS:		
		"Use Precautions" and "For Optimum Results" for important usage information. the "Mixing Instructions" for adding individual formulations into the spray tank. NS:		
	Do not a halosulfu	the "Rotational Crop Restrictions" section for all applicable rotational crop restrictions.  pply more than 1 application of PERMIT PLUS with a total application not to exceed 3/4 oz/A (0.0314 lb uron and 0.0042 lb thifensulfuron) per 12 month period.		
	• Following	g application to foliage, allow 30 days before grazing domestic livestock, harvesting forage, or harvesting silage.		

CROP	OZ/ACRE	DIRECTIONS FOR USE		
RICE (NOT FOR USE IN CALIFORNIA) (48)	3/4 - 1 1/2	Apply foliar ground applications of PERMIT PLUS broadcast using a minimum of 10 gallons of water per acre. Apply foliar aerial applications of PERMIT PLUS broadcast using a minimum of 5 to 15 gallons of water per acre. Pre-plant burn down, at planting, and preemergence to rice:  • Preemergence Pre-plant burn down or At planting:  Apply PERMIT PLUS at 3/4 - 1 1/2 oz/A in combination with glyphosate or other suitable agricultural, herbicides for burn down of emerged annual grasses, broadleaf weeds and nutsedge. Do not exceed 1 1/2 oz/A (0.0628 lb halosulfuron and 0.0084 lb thifensulfuron) per 12 month period. If this product is applied pre-plant burn down, refer to "Time Interval Before Planting" table for complete directions for use.  Postemergence applications to rice:  Apply PERMIT PLUS for postemergent weed control from prior to the emergence of rice until after permanent flood is established. Apply PERMIT PLUS at 3/4 oz/A (0.0314 lb halosulfuron and 0.0042 lb thifensulfuron), with the total application rate not to exceed 1 1/2 oz/A (0.0628 lb halosulfuron and 0.0084 lb thifensulfuron) per 12 month period.  Post Flood Application to rice:  • Post Flood application to rice:  Apply PERMIT PLUS as a dry broadcast applications at 3/4 oz by weight per acre, with the total application		
		rate not to exceed 1 1/2 oz product by weight per acre per 12 month period.		

CROP	OZ/ACRE	DIRECTIONS FOR USE
RICE (NOT FOR USE IN CALIFORNIA) (48)	3/4	PERMIT PLUS Tank Mixtures for Rice: 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 and precautionary language of the products in the mixture. Before mixing in the spray tank, test the compatibility mixing all components in a small container in proportionate quantities. Refer to "Mixing instructions" for adding individual formulations into the spray tank.
		Tank mixtures should not be applied if the crop is under severe stress due to drought, poor fertility (especially low nitrogen levels), hail, frost and insects. Tank mix applications under these conditions may cause temporary crop injury.
		Preemergence & Pre-Plant Applications:  Tank mixtures for additional preemergent weed control, including but not limited to Bolero®, Command® 3ME, glyphosate, pendimethalin or quinclorac can be added.
		Postemergence Applications:  Tank mixtures for post emerge grass control, including but not limited to Newpath®, Beyond®, Propanil, Facet®, Grasp®, and Regiment® can be added.
		Tank mixtures for additional broadleaf weed control, including but not limited to Grandstand®, Propanil and Propanil products, Aim®, Facet®, Basagran®, Londax®, Grasp®, Regiment®, NewPath®, Beyond® and 2,4-D can be added.  Insecticide and fungicide products can be tank mixed with PERMIT PLUS.
		Do not apply more than 3/4 oz/A (0.0314 lb halosulfuron and 0.0042 lb thifensulfuron) per application, with the tota not to exceed 1 1/2 oz/A (0.0628 lb halosulfuron and 0.0084 lb thifensulfuron) per 12 month period.  Sequential Applications:
		PERMIT PLUS can be applied sequentially with other herbicides. Read all tank mix herbicide labels for application information, restrictions and precautions.
	PRECAUTIO	NS:
		ition of MSO can enhance control of emerged broadleaf weeds.
		"Weeds controlled" chart for applications specific to weed height.
	<ul> <li>To ensure</li> </ul>	"Application Equipment and Instructions" section for spray drifts management techniques. re product effectiveness avoid using PERMIT PLUS on rice fields which have a history of weed biotypes resistant perbicides.
	Control of	of emerged weeds with foliar applications is best when 70% - 80% of the weed foliage is exposed. submerged weeds is best when weeds have 2 leaves or less.
		pply more than 2 applications with the total application not to exceed 11/2 oz/A (0.0628 lb Halosulfuron and 0.0084
	<ul> <li>Do not re</li> </ul>	sulfuron) per 12 month period. eintroduce water into rice fields or checks for at least 24 hours following foliar applications of PERMIT PLUS. epply within 48 days of harvest.
		n 14 days between applications.

CROP	OZ/ACRE	DIRECTIONS FOR USE
SULFONYLUREA - TOLERANT SOYBEAN (STS) (88)	3/4 – 1 1/2	Preemergence or Preplant Spring Application Varieties Tolerant to Sulfonyl-Urea Herbicides (STS)  Apply PERMIT PLUS at a rate of 3/4 – 1 1/2 oz/A for contact and residual control or suppression of many labeled broadleaf winter and early germinating summer annual weeds. Do not exceed 1 1/2 oz/A (0.0628 lb Halosulfuron and 0.0084 lb Thifensulfuron) per 12 month period. Make applications to actively growing weeds free of visible stresses for best activity to occur.
		Tank Mixtures for (STS) Soybeans:  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 and precautionary language of the products in the mixture. Before mixing in the spray tank, test the compatibility mixing all components in a small container in proportionate quantities. Refer to "Mixing instructions" for adding individual formulations into the spray tank.
		For enhanced control of broadleaf winter or early germinating summer annual weeds, PERMIT PLUS can be tank mixed with glyphosate and/or 2,4-D LV ester. Base the use rate of 2,4-D or glyphosate on the label range of the given product and formulation chosen and follow all other use restrictions. If emerged grasses are present, always add glyphosate to control these weeds.
		To maximize burndown of existing broadleaf weeds, always add a COC (1% v/v) and granular AMS (2 - 4 lb/A) or UAN (1 - 2% v/v) to the mix.  In reduced tillage systems, do not make any tillage operation after application of PERMIT PLUS.
		While no instances of crop injury to sulfonyl-urea tolerant varieties have been seen from spring preplant or preemergence applications in research trials, not all soybeans have been screened for tolerance to PERMIT PLUS. Please consult with local seen agronomists for herbicide tolerance information. Do not apply PERMIT PLUS if plans include planting Adzuki beans as unacceptable crop injury could result.

CROP	OZ/ACRE	DIRECTIONS FOR USE
SULFONYLUREA - TOLERANT SOYBEAN (STS) (88)	3/4	Postemergence Applications to Soybean Varieties Tolerant to Sulfonyl-Urea Herbicides (STS)  Apply PERMIT PLUS at a rate of 3/4 oz/A (0.0314 lb halosulfuron and 0.0042 lb thifensulfuron) for contact and residual control of many broadleaf weeds and nutsedge. Apply PERMIT PLUS once per season as a postemergence treatment to varieties which are sulfonyl-urea tolerant (STS). Apply PERMIT PLUS from V2 through R2 stage.
		Do not apply more than 3/4 oz/A (0.0314 lb halosulfuron and 0.0042 lb thifensulfuron) per application. Not to exceed 1 1/2 oz/A (0.0628 lb Halosulfuron and 0.0084 lb thifensulfuron) per 12 month period.  Tank Mixtures for Soybeans:
		PERMIT PLUS can be tank mixed with glyphosate or glufosinate if the soybean variety has the respective herbicide tolerant trait. Other herbicides can be tank mixed with PERMIT PLUS. Read all tank mix herbicide labels for application information, restrictions and precautions.
		Always add a NIS (0.25 - 0.5% v/v) or COC (1% v/v) and granular AMS (2 - 4 lb/A) or UAN (1 - 2% v/v) to the mix. Applications can be made to actively growing weeds free of stress for best activity to occur.
		Apply only to Sulfonyl-Urea Herbicides (STS) or sever crop injury will result.  Occasional phytotoxicity symptoms may appear on some susceptible sulfonyl-urea tolerant varieties when this product is applied post emergent. Possible symptoms could include stunting (seen as a reduction in leaf size or internode length), yellowing leaves and/or red veins, and necrosis of the leaves and petioles. In varieties evaluated that have exhibited these symptoms, crop has quickly recovered after metabolizing the product. The potential for soybean injury is most pronounced with applications made during hot, humid conditions, under widely fluctuating weather or temperature conditions, or with applications to soybeans under stress.
		he "Weeds Controlled" section for specific weed control directions. Use Precautions" and "For Optimum Results" for important usage information.
	<ul><li>Grazing of Do not ap thifensulfor</li></ul>	or feeding of treated soybean forage/silage and hay is prohibited.  oply more than 2 applications with a total application not to exceed 1 1/2 oz (0.0628 lb Halosulfuron and 0.0084 lb uron) per 12 month period.  14 days between applications.
FALLOW GROUND (30)	3/4 - 1 1/2	Apply foliar ground applications of PERMIT PLUS broadcast using a minimum of 10 gallons of water per acre.  Apply foliar aerial applications of PERMIT PLUS broadcast using a minimum of 5 to 15 gallons of water per acre.  Apply PERMIT PLUS broadcast to fallow ground at use rates of 3/4 - 1 1/2 oz of product by weight per acre.  Tank Mixtures
		This product may be applied in combination with other products that are registered for the same application. 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 and precautionary language of the products in the mixture.

CROP	OZ/ACRE	DIRECTIONS FOR USE				
	PRECAUTIONS:					
	<ul> <li>Refer to t</li> </ul>	Refer to the "Weeds Controlled" section for specific weed control directions.				
	<ul> <li>Refer to l</li> </ul>	Refer to Use Precautions" and "For Optimum Results" for important usage information.				
	RESTRICTIONS:					
	<ul> <li>Refer to t</li> </ul>	Refer to the "Rotational Crop Restrictions" for applicable rotational crop information.				
	<ul> <li>Do not apply more than 2 applications with a total application not to exceed 3 oz/A (0.126 lb Halosulfuron and 0.017 lb thifensulfuron) per 12 month period.</li> </ul>					
	<ul> <li>Minimum</li> </ul>	Minimum 14 days between applications.				

# **ROTATIONAL CROP RESTRICTIONS**

Rotation intervals below may need to be extended if drought or cool conditions prevail. Gowan Company recommends that the end user test this product in order to determine its suitability for such intended use. It may be appropriate to use shorter Intervals in areas where local experience has demonstrated safety. In the event of crop failure, labeled crops may be planted back into the treated area at the user's risk for potential phytotoxicity to the subsequent crop. When using PERMIT PLUS in tank mixes, refer to the individual product labels being tank mixed. To determine rotational crop restrictions follow the longest rotational limitation of the product being tank mixed.

# TIME INTERVAL BEFORE PLANTING (Months after treatment with PERMIT PLUS)

CROP	MONTHS	EXCEPTIONS
IR/IMR Field corn	0	
Soybeans (Sulfonyl-urea Tolerant)	0	
Rice	0	
IT Field corn	1	
Normal Field corn	1	
Dry Beans	1.5	
Sugarcane	1.5	
Barley (winter)	2	
Forage Grasses	2	
Oats	2	
Proso Millet	2	
Rye (winter)	2	
Seed corn	2	
Sorghums	2	
Spring cereal crops	2	
Wheat (winter)	2	
Popcorn, Sweetcorn	3	
Cotton	4	
Peanuts	6	
Tomato (transplant)	8	2 months in the northeast, Midwest, and southeast, 3 months in TX
Alfalfa	9	
Clovers	9	
Field Peas	9	
Peas	9	
Potatoes	9	
Pumpkins, Squash	9	2 months in the southeast
Cucumbers	9	2 months in the northeast, midwest, and southeast, 3 months in TX
Soybeans	9	Where pH is less than 7.5 the interval is 2 months
Melons	9	2 months in the southeast and TX
Snap Beans	9	2 months in the northeast, Midwest, and southeast, 3 months in TX
Peppers	10	3 months in TX
Eggplant	12	
Radish	15	
Cabbage	15	
Canola	15	
Carrot	15	
Mint	18	
Broccoli, Cauliflower, Collards	18	
Leeks, Onions	18	
Lettuce crops	18	
Sunflowers	21	
Sugar beet (Michigan only)	24	
Sugar beet and Red beet	24	Where rainfall is sparse or irrigation required, the interval is 36 months
Spinach	21	
Sugar beet (ND, MN, Red River Valley)*	36	
		1

\*Also includes other regions where rainfall is sparse or irrigation is required.

Refer to individual product labels to determine rotational crop restrictions when tank mixtures are used.

#### STATE REGISTRATION LIST

Southeast: AL, AR, FL, GA, LA, MS, NC, SC, TN, TX,

Northeast & Midwest: CT, DE, IL, KY, MA, MD, ME, MO, NH, NJ, NY, OH, PA, RI, UT, VA, VT, WV

Pacific Northwest: OR, ID, WA

# STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store under cool, dry conditions (below 120 F). Do not store under moist conditions.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**DISPOSAL AUTHORITIES:** If none of the foregoing procedures is permitted by state and local authorities, then contact your State Pesticide or Environmental Control Agency, or your local Hazardous Waste Disposal office, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.

For other product information, contact Gowan Company or see Material Safety Data Sheet.

#### NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the fullest extent permitted by law, when you buy this product, you agree to accept these risks.

Gowan Company warrants that this product conforms to the specifications on the label when used in strict conformance with Directions for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

PERMIT PLUS® is a registered trademark of Nissan Chemical Industries Ltd. All other brands are trademarks of their respective owners.

© 2015 Gowan Company, L.L.C.

Formulated in the United States using Active Ingredient made in Japan.

Manufactured by Nissan Chemical Industries, Ltd.

01-R0321EPA