BASF
We create chemistry

Dimethenamid-P	Group	15	Herbicide

Outlook®

Herbicide

A selective residual herbicide for use in certain agricultural crops

Active Ingredient*:

dimethenamid-P: (S)-2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide	63.9%
Other Ingredients:**	36.1%
Total:	100.0%

* Contains 6.0 pounds of active ingredient per gallon

** Contains petroleum distillates

EPA Reg. No. 7969-156 **EPA Est. No.**

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

See inside for complete **First Aid**, **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents:

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

FIRST AID	
If in eyes	• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes. • Call a poison control center for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • **DO NOT** give any liquid to the person. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
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.
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 BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information: 1-800-832-HELP (4357).	
Note to Physician: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING.

Causes substantial but temporary eye injury. Harmful if inhaled, swallowed, or absorbed through the skin. **DO NOT** get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear (goggles or a face shield)

User Safety Requirements

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

Engineering Controls

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for **applicators and other handlers** and have such PPE immediately for use in an emergency, such as a spill or equipment breakdown.

Mixers and loaders for aerial applications must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240 (d)(4)] for dermal protection, and must:

- Wear personal protective equipment (PPE) required in the PPE section of this labeling for applicators and other handlers
- Wear protective eyewear, if the system operates under pressure
- Either use a closed system that also meets the requirements in the WPS for inhalation protection or wear a NIOSH-approved dust-mist respirator with a TC84 cartridge
- Be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: coveralls, chemical-resistant footwear, and dust-mist respirator, or if using a closed system cab that provides respiratory protection, a NIOSH-approved dust-mist respirator with a TC84 cartridge

USER SAFETY RECOMMENDATIONS

Users should:

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

Environmental Hazards

DO NOT apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

Dimethenamid-P has properties that may result in groundwater contamination. Application in areas where soils are permeable or coarse and groundwater is near the surface could result in groundwater contamination.

Dimethenamid-P has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

Point-source Contamination. To prevent point-source contamination, **DO NOT** mix or load this or any other pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sinkholes, 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 dike mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwater, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent:
- Back-siphoning into wells
- Spills
- Improper disposal of excess pesticide, spray mixes, or rinsates

Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement Dissolved in Runoff or through Soil.
DO NOT apply under conditions which favor runoff.
DO NOT apply to impervious substrates such as paved or highly compacted surfaces or frozen soils. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. To minimize the possibility of groundwater contamination, carefully follow application rate as affected by soil type in the **Application Instructions** section of this label.
DO NOT apply if all three criteria exist: coarse soils classified as sand (does not include loamy sand or sandy loam), less than 3% organic matter (as determined by soil tests, if not known), and where depth to groundwater is 30 feet or less.

Movement by Water Erosion of Treated Soil.
DO NOT apply or incorporate this product by flood or furrow irrigation. Ensure treated areas have received at least 0.5 inch of rainfall before using tailwater for subsequent irrigation of other fields.

Endangered Species Protection

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine if your county or parish has a Bulletin, and to obtain that Bulletin, consult http://www.epa.gov/espp/, or call 1-844-447-3813 no more than 6 months before using this product. Applicators must use Bulletins that are in effect in the month in which the pesticide will be applied. New Bulletins will generally be available from the above sources 6 months before their effective dates.

To avoid adverse effects on endangered plant species, applicators must comply with the following mitigation measures when endangered plant species are known to occur in proximity of the application site:

- **Aerial Application** - Leave a 150-foot untreated buffer between treatment area and endangered plant populations.
- **Ground Application** - Use low-pressure nozzles according to the manufacturer's specifications that produce only medium-to-coarse or very coarse droplets **AND** leave a 35-foot untreated buffer between treatment area and known endangered plant populations.

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Unless otherwise directed in supplemental labeling, follow all applicable directions, restrictions, precautions and **Conditions of Sale and Warranty**. This labeling must be in the user's possession during application.

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**.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear (goggles or a face shield)

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

DO NOT use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs and away from other pesticides. Avoid cross-contamination with other pesticides. Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

(continued)

STORAGE AND DISPOSAL *(continued)*

Pesticide Disposal

Wastes resulting from this product must be disposed of on-site or at a waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: 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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

(continued)

STORAGE AND DISPOSAL *(continued)*

Container Handling *(continued)*

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container 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.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

In Case of Emergency

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF 1-800-832-HELP (4357)

Steps to take if material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

Product Information

Outlook® herbicide is a selective residual herbicide for controlling many annual grass weeds, annual broadleaf weeds, and sedge as they germinate (see **Table 1**). **Outlook** can be used in agricultural field and row crops including bean (dry), beet (sugar), corn [field corn (grain, seed, silage), fresh sweet corn, popcorn], cotton, fallow, garlic, hops, horseradish, onions (dry bulb, green), peanut, perennial grasses grown for seed, potato, shallots (dry bulb), sorghum (grain), soybean, and winter squash.

Table 1. Weeds Controlled

Common Name	Scientific Name
Annual Grass Weeds	
Barnyardgrass	*Echinochloa crus-galli*
Bluegrass, annual	*Poa annua*
Bluegrass, roughstalk	*Poa trivialis*
Brome, California	*Bromus carinatus*
Brome, downy	*Bromus tectorum*
Crabgrass, large	*Digitaria sanguinalis*
Crabgrass, smooth	*Digitaria ischaemum*
Cupgrass, Southwestern	*Eriochloa gracilis*
Cupgrass, woolly[1]	*Eriochloa villosa*
Fescue, rattail	*Vulpia myuros*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria viridis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Johnsongrass (seedling)[1]	*Sorghum halepense*
Millet, wild proso[1]	*Panicum miliaceum*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas[1]	*Panicum texanum*
Red rice	*Oryza sativa*
Ryegrass, Italian	*Lolium multiflorum*
Sandbur[1]	*Cenchrus* spp.
Shattercane[1]	*Sorghum bicolor*
Signalgrass, broadleaf[1]	*Brachiaria platyphylla*
Witchgrass	*Panicum capillare*

(continued)

Table 1. Weeds Controlled *(continued)*

Common Name	Scientific Name
Annual Broadleaf Weeds	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, Powell	*Amaranthus powellii*
Beggarweed, Florida[1]	*Desmodium tortuosum*
Carpetweed	*Mollugo verticillata*
Chamomile, mayweed	*Anthemis cotula*
Eclipta[1]	*Eclipta alba*
Lambsquarters, common[1]	*Chenopodium album*
Nightshade, black[2]	*Solanum nigrum*
Nightshade, cutleaf[2]	*Solanum triflorum*
Nightshade, Eastern black[2]	*Solanum ptycanthum*
Nightshade, hairy[2]	*Solanum sarrachoides*
Pigweed, prostrate	*Amaranthus blitoides*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Pigweed, tumble	*Amaranthus albus*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common[1]	*Ambrosia artemisiifolia*
Spurge, nodding	*Chamaesyce nutans*
Spurge, spotted	*Chamaesyce maculata*
Waterhemp, common[2]	*Amaranthus rudis*
Waterhemp, tall[2]	*Amaranthus tuberculatus*
Sedge	
Flatsedge, rice	*Cyperus iria*
Nutsedge, yellow[2]	*Cyperus esculentus*

[1] Partial control or suppression only. To complement control, use **Outlook® herbicide** in tank mixes or sequential application with other herbicides that provide additional control of these weed species.

[2] For best control of these species, use the highest rate specified by soil type. If dry conditions exist near application or excessive rainfall occurs early in season, a post emergence herbicide or cultivation may be required to help control these weeds.

Mode of Action

Dimethenamid-P, the active ingredient in **Outlook**, is a **Group 15** (WSSA) **Group K_3** (HRAC) herbicide belonging to the chloroacetamide chemistry class. **Outlook** is a root-and-shoot growth inhibitor that controls susceptible germinating seedlings before or soon after they emerge from the soil.

Herbicide Resistance Management

Outlook is a **Group 15/Group K_3** herbicide. Any weed pop ulation may contain or develop plants naturally resistant to **Outlook** and other **Group 15** herbicides. Weed species with resistance to **Group 15** may eventually dominate the weed population if **Group 15** herbicides are used repeatedly in the same field or in successive years as the primary meth od of control for targeted species. This may result in partial or total loss of control of those species by **Outlook** or other **Group 15** herbicides.

To delay herbicide resistance consider:

- Avoiding the consecutive use of **Outlook** or other target-site-of-action **Group 15** herbicides that have a similar target site of action on the same weed species.
- Using tank mixes 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 (Integrated Pest Management) program including cultural and mechanical methods.
- Monitoring treated weed populations for loss of field efficacy, and control of escapes with effective alternative herbicides or mechanical methods.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program needs to consider all of the weeds present.
- Scout fields prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Scout fields after application to verify the treatment was effective.
- Suspected herbicide-resistance weeds may be identified by these indicators:
  1. Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  2. A spreading patch of non-controlled plants of a particular weed species; and
  3. Surviving plants mixed with controlled individuals of the same species.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA and/or use non-chemical methods to remove escapes, as practical, with the goal of preventing further seed production.
- Report any incidence of non-performance of this product against a particular weed species to your local BASF representative.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management directions for specific crops and resistant weed biotypes.

Application Instructions

Outlook provides most effective weed control when applied by ground or aerial equipment and subsequently incorporated into soil by rainfall, sprinkler irrigation, or mechanical tillage before weed seedling emergence from soil. **Outlook** can also be applied through chemigation.

Outlook may be applied as a preplant incorporated, preplant surface, preemergence, early postemergence, or

layby (corn) treatment. **Outlook® herbicide** may be applied using water or sprayable fluid fertilizer as the spray carrier. Additionally, **Outlook** may be impregnated on and applied with dry bulk fertilizer. Sprayable fluid fertilizer as a carrier is not advised for use after crop emergence. Refer to **Additives** for more information.

Application Rate

Application rates for **Outlook** when applied alone, in tank mix, or in sequential applications are given in **Table 2**, and vary by soil texture and organic matter content. Refer to **Crop-specific Information** for additional rate information.

Table 2. Outlook Application Rate/Acre[1,2,3]

Soil Texture	Organic Matter Content	
	Less than 3% (fl ozs)	**3% or more** (fl ozs)
Coarse	12 to 14	14 to 18
Medium	14 to 18	18 to 21
Fine		

See tank mix descriptions for the specified application rate ranges of other herbicides tank mixed with **Outlook**.

[1] The application rates listed are intended for full-season control of targeted weeds. Reduced application rates (8 to 16 fl ozs/A of **Outlook**) may be used where partial control or reduced length of soil residual control is required, such as postemergence application, or preemergence application where cultivation or sequentially applied herbicides will be used for added control of the same targeted weed species.
Use 8 to 12 fl ozs/A of **Outlook** on coarse-texture soils.
Use 12 to 16 fl ozs/A of **Outlook** on medium-texture and fine-texture soils.

[2] For all early preplant applications, use 21 fl ozs/A of **Outlook**.

[3] On muck soils and high organic matter soils, apply **Outlook** at 21 fl ozs/A.

Soil texture groups used in this label are **coarse** (sand, loamy sand, sandy loam), **medium** (silt, silt loam, loam, sandy clay loam), and **fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

DO NOT apply on coarse soils classified as sand (does not include loamy sand or sandy loam) with less than 3% organic matter (as determined by soil tests, if not known), and where depth to groundwater is 30 feet or less. When use rates are expressed in ranges, use the lower rate for more coarsely textured soils lower in organic matter; use the higher rate for more finely textured soils high in organic matter.

Preplant Incorporated Application

Apply **Outlook** and incorporate into the upper (1 to 2 inches) soil surface up to 2 weeks before planting. Use a harrow, rolling cultivator, finishing disk, or other implement capable of giving uniform shallow incorporation. Avoid deeper incorporation or reduced weed control or crop injury may result.

Preplant Surface Application

For use in minimum tillage or no-till production systems, apply **Outlook** alone or in tank mixes up to 45 days before planting. When making early preplant application (15 to 45 days before planting), use the highest rate specified for the specific soil type. Early preplant applications are not for use on coarse-texture soils or in areas where average annual rainfall (or rainfall plus irrigation) typically exceeds 40 inches. Early preplant applications may be applied as part of a split application program where the second application is made after planting (use 2/3 of **Outlook** rate early followed by 1/3 of rate after planting). A split application is advised when the initial application is made more than 30 days before planting.

Preemergence Surface Application

Broadcast treatment uniformly to the soil surface after planting and before crop emergence. Rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to move this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur and weed seedling emergence begins, a shallow cultivation or rotary hoeing will improve performance.

Early Postemergence Application

Outlook must be applied before weed seedling emergence or in a tank mix with products registered for use on the specific crop on this label that control the emerged weeds. Refer to **Crop-specific Information** for specific postemergence applications by crop.

Layby Application

Use **Outlook** in field corn, seed corn, and popcorn. See **Crop-specific Information - Corn** for more details on layby application.

Split Application

Outlook may be used in split application programs where applications are made as part of the methods described above. If applications are less than 2 weeks apart, the total **Outlook** rate used must not exceed the maximum rate given for each specific soil type. If applications are 2 weeks or more apart, a total **Outlook** application rate of up to 21 fl ozs/A per year may be used on any soil type in all labeled crops except corn, cotton, sugar beet, and soybean. See **Crop-specific Information** section for maximum seasonal application rate in corn, cotton, sugar beet, and soybean.

Fall Application

For use only in the following states:
Iowa, Minnesota, North Dakota, South Dakota, Wisconsin, north of Highway 136 in Illinois, and north of Highway 91 in Nebraska.

Outlook may be used in fall applications to control weeds in minimum tillage or no-till corn or soybean production systems planted the following spring. Apply up to 21 fl ozs/A of **Outlook** to medium-texture and fine-texture soils with greater than 2.5% organic matter.

Fall applications must be made after October 1. Apply **Outlook** in the fall after crop harvest when soil temperature at the 4-inch depth is sustained at less than 55° F and before the ground freezes.

Tillage operations may be conducted before or after applying **Outlook® herbicide**. If following an application, tillage should be no more than 2 to 3 inches deep to uniformly incorporate the herbicide into the upper soil surface. If a sequential application program (fall application followed by spring application of **Outlook**) is used, the maximum combined rate of **Outlook** that may be applied is 21 fl ozs/A per crop season.

Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they must be observed. The applicator should be familiar with and take into account the following drift reduction advisory information.

Controlling Droplet Size
The most effective way to reduce drift potential is to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind**; **Temperature and Humidity**; and **Temperature Inversion**).

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - **DO NOT** exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so spray is released parallel to the airstream produces larger droplets than other orientations and is preferred practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Boom Length

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

Application Height

Making applications at the lowest possible height (aircraft, ground-driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind. Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind

Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Avoid application below 3 mph because of variable wind direction and high inversion potential.
NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversion

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

Sensitive Areas

Spray drift from applying this product may result in damage to sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or nontarget crops or plants) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

Wind Erosion

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

Aerial Application Method and Equipment

Water Volume. Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Managing Spray Drift from Aerial Application

Applicators must follow these requirements to avoid off-target drift movement:

- **Boom Length** - The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- **Nozzle Orientation** - Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.
- **Application Height** - Without compromising aircraft safety, application should be made at a height of 10 feet or less above the crop canopy or tallest plants.

Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Banding)

When applying **Outlook® herbicide** by banding, calculate the amount of herbicide and water volume per acre needed using the following formula:

$$\frac{\text{bandwidth in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{banding herbicide rate per acre}$$

$$\frac{\text{bandwidth in inches}}{\text{row width in inches}} \times \text{broadcast volume per acre} = \text{banding water volume per acre}$$

Ground Application (Broadcast)

Water Volume. Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume for accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and then triple rinsing the equipment before and after applying this product.

Ground Application (Dry Bulk Fertilizer)

Outlook may be impregnated or coated onto dry bulk granular fertilizer carriers for preplant surface, preplant incorporated, or preemergence application. Impregnation or coating may be conducted by the in-plant bulk system or the on-board system. When impregnated onto some dry fertilizer blends, **Outlook** may exhibit a strong odor. Perform the mixing operation in a well- ventilated area.

Outlook may also be applied in herbicide tank mixes where the tank mix companion product is also registered for these application systems. Individuals or agents selling **Outlook** in these application systems are responsible for following all state and local regulations regarding fertilizer and herbicide blending.

Addition of a drying agent may be necessary if the fertilizer and herbicide blend is too wet for uniform application because of high humidity, high urea concentration, or low fertilizer use rate. Slowly add the drying agent to the blend until a flowable mixture is obtained. Drying agents are not advised for use with on-board impregnation systems.

Under some conditions, fertilizer impregnated with **Outlook** may clog air tubes or deflector plates on pneumatic application systems. Mineral oil may be added to **Outlook** before blending with fertilizer to reduce plugging. **DO NOT** use drying agents when mineral oil is used. To avoid separation of **Outlook** and mineral oil mixes in cold temperatures, either keep mixture heated or agitated before blending with fertilizer. Mineral oil may be used at in-plant blending stations or on-board injection systems.

Apply 200 to 750 pounds of the fertilizer and herbicide blend per acre. Application must be made uniformly to the soil to prevent possible crop injury and for satisfactory weed control. Impregnated fertilizer spread at 1/2 rate and overlapped to obtain a full rate will offer a more uniform distribution. For granular fertilizer application to protect small birds and mammals, soil incorporation of the granules is required. A shallow (1 to 2 inches) incorporation is desirable for improved weed control. Deeper incorporation may result in unsatisfactory weed control.

Use the following formula to calculate the herbicide rate when using dry bulk fertilizer applications:

$$\frac{\text{fl ozs/A}}{\text{fertilizer (lbs/A)}} \times 2{,}000 = \text{fluid ounces per ton of fertilizer}$$

Incompatible Mixtures

DO NOT impregnate **Outlook** or **Outlook** mixes on ammonium nitrate, potassium nitrate, or sodium nitrate fertilizers or fertilizer blends. Single superphosphate (0-20-0) and triple superphosphate (0-46-0) may be impregnated only with **Outlook** alone.

Chemigation Application via Sprinkler Irrigation Systems

Outlook® herbicide may be applied as a chemigation treatment through sprinkler irrigation systems. Apply this product **ONLY** through a sprinkler irrigation system of the following type: center pivot, end tow, hand move, lateral move, side (wheel) roll, or solid set. **DO NOT apply this product through any other type of sprinkler irrigation system.**

Application may be made alone or in tank mixtures with other herbicides on this label registered for use in specified sprinkler irrigation systems. Application must be made within specific crop stage timings and product use rates given in the container label **Directions For Use**.

Uniform distribution of **Outlook**-treated irrigation water is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness, or illegal pesticide residue in the crop. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.

Proper calibration is the responsibility of the applicator. The system must be properly calibrated (with water only) to ensure the amount of **Outlook** applied corresponds to the specified rate. Apply **Outlook** in volume minimums of 0.33 to 0.67 inch of water using the lower volume for coarse-texture soils and the higher volume for fine-texture soils. Application made in high volumes of water (more than 1 inch) may result in reduced weed control.

Meter herbicide dilution into irrigation water through the entire time of water application for center pivot and lateral move sprinkler systems. For solid-set and hand-move sprinkler irrigation systems, apply **Outlook** through the system at the beginning of the set; then follow with additional water to reach volume minimums as listed by soil type. To increase calibration accuracy of injection metering equipment, dilute **Outlook** in a minimum of 3 parts water to 1 part **Outlook**. Maintain agitation in injection nurse tanks to keep a uniform herbicide suspension during application.

Special instructions for chemigation:

1. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
2. **DO NOT** connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
3. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
4. Recirculate and/or contain tail water (runoff water) from chemigation that contains **Outlook** in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent, approved crops for which **Outlook** is registered for this type of application.
5. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. It must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
6. The sprinkler chemigation system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow. In addition, systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. The sprinkler chemigation system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
8. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Chemigation systems connected to public water systems:

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section.

Additives

Spray adjuvants have little or no influence on **Outlook** performance when application is made before weed emergence. However, several tank mixes with **Outlook** require adjuvants to improve burndown of emerged weeds. Therefore, surfactants and/or low rate fertilizer [28%, 30%, or 32% urea ammonium nitrate (UAN) or ammonium sulfate (AMS)], or crop oil concentrate (COC)

may be used with **Outlook® herbicide** tank mixes applied preplant, preemergence, or early postemergence to the crop.

Follow the adjuvant directions on the tank mix partner's label.

When an adjuvant (or a specific adjuvant product, such as a drift control agent) is to be used with this product, BASF recommends the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant for use on food crops.

Oil Concentrate

A crop oil concentrate must contain either a petroleum-oil or vegetable-oil base and must meet all of the following criteria:

- Nonphytotoxic
- Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test
- Successful in local experience

The exact composition of suitable products will vary; however, vegetable-oil and petroleum-oil concentrates should contain emulsifiers to provide good mixing quality.

Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see **Compatibility Test for Mix Components**.

The use of adjuvants containing penetrants, such as petroleum-based oils, after corn emergence may cause crop injury.

Nitrogen Source

Urea Ammonium Nitrate (UAN). Use 1 to 2 gallons of UAN (28%, 30%, or 32% nitrogen solution) per acre. **DO NOT** use brass or aluminum nozzles when spraying UAN.

Ammonium Sulfate (AMS). AMS at 8 to 17 pounds per 100 gallons of spray solution may be substituted for UAN. Use high-quality AMS (spray grade) to avoid nozzle plugging. Other sources of nitrogen are not as effective as those mentioned. BASF does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

Nonionic Surfactant (NIS)

The standard label recommendation is 1 to 2 quarts of an 80% active (NIS) per 100 gallons of water. For certain weeds, a higher spray surfactant rate is advised.

Tank Mixing Information

It is the pesticide user's responsibility to ensure that all products in the mixtures 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.

Outlook may be tank mixed or applied sequentially with other herbicide products registered for use in any labeled crop found in this label for a broader spectrum of residual weed control and/or control of emerged weeds. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on the labeled crop. Read and follow tank mix product labels for application instructions, use restrictions and precautions, and rotational cropping guidance. Physical incompatibility, reduced weed control, or crop injury may result from mixing **Outlook** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Local agricultural authorities may be a source of information when using other than BASF-advised tank mixes.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

For 20 gallons/A spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, or fine particles that precipitate to the bottom, or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

Mixing Order

Maintain constant agitation throughout mixing and application.

1. **Water** - Begin by agitating a thoroughly clean sprayer tank 3/4 full of clean water.
2. **Inductor** - If an inductor is used, rinse it thoroughly after each component has been added.
3. **Products in PVA bags** - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
4. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
5. **Water-soluble products**
6. **Emulsifiable concentrates** (such as **Outlook** or oil concentrate when applicable)
7. **Water-soluble additives** (such as AMS or UAN when applicable)
8. **Remaining quantity of water**

Use Restrictions

- **Maximum seasonal application rate** - **DO NOT** apply more than a total of 0.98 pound of active ingredient dimethenamid-P (21 fl ozs of **Outlook® herbicide**) per acre per season in all labeled crops except corn, cotton, sugar beet, and soybean. See **Crop-specific Information** section for maximum seasonal application rate in corn, cotton, sugar beet, and soybean.
- **Preharvest Interval (PHI)** - Refer to **Crop-specific Information** for crop-specific preharvest intervals and feeding and grazing restrictions.
- **Outlook** is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.
- **DO NOT** contaminate irrigation ditches or water used for domestic purposes.

Use Precautions

- **Emergency replanting (recropping) intervals**
  - If corn, dry bean, grain sorghum, peanut, or soybean treated with **Outlook** are lost to adverse weather or for other reasons, the area treated may be replanted to any of those crops immediately, unless specified otherwise in the **Crop-Specific Information** section of this label.
  - If the original **Outlook** treatment was broadcast, **DO NOT** make a second application of **Outlook**.
  - If the original application was banded and the second crop is planted in the row middles, a second band application may be applied.
  - If **Outlook** has been applied to sugar beets, cotton, dry bulb onions, garlic, dry bulb shallots, green onions, hops, perennial grass grown for seed, horseradish, potato, or winter squash and crop failure occurs because of adverse weather or other reasons, replanting (recropping) these crops is not advised. If replanting a crop is necessary, plant any of the following labeled crops (corn, dry bean, grain sorghum, peanut, soybean) where soil application of **Outlook** is registered.
- **Stress** - Application to crops under stress because of lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures may result in crop injury.

Crop Rotation Intervals

Refer to **Table 3** to determine the proper interval between **Outlook** application and the planting of rotational crops. Determine the rotational crop interval for tank mix products and use the most restrictive interval of all products applied.

Table 3. Rotational Crop Planting Intervals by Outlook Application Rate

Crop	Outlook Use Rate (fl ozs/A)	
	< 16	16 to 21
	Rotational Crop Interval (months after application)	
Alfalfa	4	6
Canola (rapeseed)	4	6
Cotton	4	4
Peas (dry field, edible)	4	4
Small grains	4	4
Cover crops (winter, spring)*	4	6
Other crops	6	9

* Cover crops (winter, spring) may be planted after application of **Outlook**, either inter-seeded into the current crop before harvest or after harvest of the current crop. Depending on the sensitivity of the sown cover crop to **Outlook**, stand establishment may be reduced. If cover crops are sown for conservation purposes prior to a 4-month interval, **DO NOT** harvest as a food or feed crop, or allow livestock to graze cover crops.

Crop-specific Information

Beet, Sugar

Outlook may be used as part of a weed management program in sugar beet.

Normal Timing

Apply **Outlook** after sugar beets have reached the 2-leaf stage **(at least 2 fully expanded true leaves)** but before sugar beets have exceeded the 8-leaf stage. Application at 2-leaf stage or later may result in temporary leaf injury. Application made from preemergence up through cotyledon stage of beets may result in significant crop injury including possible stand reduction.

Extended Timing

Apply **Outlook** after sugar beets have reached the 9-leaf stage but before sugar beets have exceeded the 12-leaf stage.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

Outlook may be applied in a single application or two split applications. If **Outlook** is applied only as a single application, **DO NOT** exceed 21 fl ozs/A. If **Outlook** is applied in two split applications, maintain a minimum of 14 days between split applications. **DO NOT** exceed a seasonal total of 24 fl ozs/A of **Outlook**. If two applications are made, apply no more than 12 to 16 fl ozs/A during the first application (applied during **Normal Timing:** 2 true-leaf to 8 true-leaf stage); then the remainder (8 to 12 fl ozs/A) of the seasonal maximum rate during the second application (applied during **Extended Timing:** 9-leaf to 12-leaf true-leaf stage).

Crop-specific Restrictions

- Harvest only mature beets and tops.
- Preharvest Interval (PHI) for Normal Timing application: 60 days
- Preharvest Interval (PHI) for Extended Timing application: 95 days

Sugar Beet Tank Mixes

Application may be made alone or in tank mixtures with other registered herbicides on sugar beet. Crop injury is possible when tank mixing other herbicides as well as any adjuvants such as methylated seed oils with **Outlook® herbicide**. Read and follow the applicable **Crop-specific Restrictions** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Field Corn (grain, seed, silage), Fresh Sweet Corn, Popcorn

Use not permitted in California on sweet corn.

Outlook may be applied preplant surface, preplant incorporated, preemergence, or postemergence to corn up to 12-inches tall. Corn in this label refers to field corn grown for grain, seed, or silage; fresh sweet corn; and popcorn. Before applying to seed corn, sweet corn, or popcorn, verify with your local seed company (supplier) the **Outlook** selectivity on your inbred line or hybrid to avoid potential injury.

Outlook may also be applied at layby to field corn, seed corn, and popcorn. Layby applications are made when corn is greater than 12-inches tall but before it is greater than 36-inches tall. For layby application for control of late-season germinating weeds, apply before weeds emerge from soil or in combination with a herbicide(s) and/or cultivation that controls emerged weeds. For best performance, direct application beneath the corn canopy.

Outlook may be applied in a single application or two split applications.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

If **Outlook** is applied in two split applications, maintain a minimum of 14 days between split applications, and **DO NOT** exceed a seasonal total of 24 fl ozs/A of **Outlook**. If two applications are made, apply no more than 8 to 16 fl ozs/A during the first application (applied preplant, preemergence, or postemergence); then apply the remainder (8 to 16 fl ozs/A) of the seasonal maximum rate during the second application (postemergence, layby).

Crop-specific Restrictions

- Corn may be grazed or fed to livestock 40 days or more after application of **Outlook**.
- **Preharvest Interval** (PHI) for sweet corn ears: 50 days
- **DO NOT** make layby application of **Outlook** to sweet corn.

Corn Tank Mixes

Refer to the tank mix product labels to confirm the respective tank mix products are registered for use on specific corn types. Not all corn products are registered for use on seed corn, popcorn, and sweet corn.

Cotton

Use not permitted in California on cotton.

Outlook may only be applied postemergence to cotton for residual weed control. Before applying to cotton, verify with your local seed company (supplier) the selectivity of **Outlook** on your variety to avoid potential injury.

Use of **Outlook** may result in temporary growth suppression in cotton if extreme conditions of high rainfall and extended periods of water-saturated soil occur during cotton germination or early seedling development.

Application Rate and Timing

Outlook may be applied in either a single postemergence application (see **Single Application** section) or in sequential postemergence applications (see **Sequential Applications** section).

Early Postemergence Application

Outlook must be applied before weed seedling emergence or in a tank mix with products registered for use on cotton that control the emerged weeds. For effective residual activity, rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to move this product into the upper soil surface where weed seeds germinate.

Outlook will provide residual control of weeds germinating after application. Weeds that are emerged at time of application must be controlled with cultivation, or a tank mix or sequential application of another herbicide labeled for postemergence weed control in cotton.

Outlook application to emerged cotton may result in temporary leaf burn, spotting, and/or stunting, but a reduction in cotton yield is not expected.

Adjuvants may be applied with **Outlook** when making early postemergence application.

Single application. Apply **Outlook** at up to 21 fl ozs/A as a broadcast spray to cotton from first true leaf stage to the mid-bloom stage (i.e. two weeks after R1 initial bloom stage). **DO NOT** apply more than 21 fl ozs/A of **Outlook** in a single application.

Sequential application. Outlook may be applied as split applications when both the initial and sequential application is made early postemergence. With the initial application, apply **Outlook** very early postemergence (typically from first true leaf stage to 6 to 10 leaf stage) at 12 to 18 fl ozs/A as a broadcast spray to cotton. For the sequential application, apply **Outlook** early postemergence (up to the mid-bloom stage, i.e. two weeks after R1 initial bloom stage) at 13 to 19 fl ozs/A as a broadcast spray to cotton.

Sequential applications must be separated by at least 14 days. **DO NOT** apply more than 31 fl ozs/A of **Outlook® herbicide** from early postemergence applications.

Crop-specific Restrictions

- **DO NOT** apply preplant surface, preplant incorporated, or preemergence in cotton.
- **DO NOT** apply more than a maximum cumulative amount of 31 fl ozs/A of **Outlook** per year.
- There is no required (preharvest) interval between a postemergence application of **Outlook** and the harvest of cotton.
- Cotton gin byproducts may be fed to livestock.

Cotton Tank Mixes

Tank mixing **Outlook** with other emulsifiable concentrate (EC) formulated products may enhance potential for cotton injury response.

Dry Bean

Use not permitted in California on dry bean.

Outlook may be applied preplant surface, preplant incorporated, preemergence, or early postemergence (first to third trifoliate stage) to dry bean classes (black turtle soup, cranberry, dry lima, great northern, navy, pink, pinto, red kidney, red Mexican, and small whites). **Outlook** may only be applied preplant surface or preemergence to garbanzo beans and lentils. **Outlook** is not registered for use in succulent beans, succulent bean varieties grown for seed, or cowpeas.

Before applying **Outlook** to dry beans, verify with your local seed company (supplier) the selectivity of **Outlook** on your specific dry bean class and variety to help avoid potential injury to sensitive classes or varieties.

If extreme conditions of high rainfall and extended periods of water-saturated soil occur during dry edible bean germination or early seedling development, **Outlook** use may result in temporary growth suppression. This suppression will not reduce dry edible bean yield. **Outlook** use postemergence may occasionally result in some temporary spotting or browning of dry bean leaves and stunting, but a reduction in dry bean yield is unexpected. Postemergence tank mixtures with other crop protection products or adjuvants may significantly enhance this effect. Depending on growing conditions, recovery from this injury begins immediately but may take several weeks for dry beans to recover completely.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

Outlook may be applied in a single application of up to 21 fl ozs/A or used in split applications of 10 to 14 fl ozs/A of **Outlook** applied initially, and the remaining 7 to 11 fl ozs/A of **Outlook** in the sequential application. **DO NOT** exceed a total of 21 fl ozs/A of **Outlook** per season.

Additional restrictions specific to dry beans are to use a maximum of 12 fl ozs/A of **Outlook** on coarse soils with organic matter less than 1.5% for soil applications made before crop emergence.

Crop-specific Restrictions

- **DO NOT** apply **Outlook** early postemergence to dry beans grown in the states of Washington and Oregon (**EXCEPTION:** Malheur county).
- **DO NOT** apply **Outlook** early postemergence by chemigation to dry beans grown in Idaho or Malheur County, Oregon.
- **Preharvest Interval** (PHI): 70 days

Dry Bean Tank Mixes

The following herbicide products may only be applied sequentially with **Outlook**:

- **Dual II Magnum® herbicide**
- **Dual Magnum® herbicide**

Dry Bulb Onions, Garlic, Dry Bulb Shallots

Outlook may be used as part of a weed management program in dry bulb onions, garlic, and dry bulb shallots grown in muck soils, high organic soils, and in mineral soils.

Apply **Outlook** after dry bulb onions, garlic, and dry bulb shallots have reached the 2 true-leaf stage until a minimum of 30 days before harvest. Application made before 2 true-leaf stage may result in significant crop injury including possible stand reduction. If applications are made to transplanted dry bulb onions, garlic, and dry bulb shallots, **DO NOT** apply until transplants are in the ground and soil has settled around transplants with several days to recover.

Outlook may be applied in a single application of up to 21 fl ozs/A or used in split applications of 10 to 14 fl ozs/A of **Outlook** applied initially, and the remaining 7 to 11 fl ozs/A of **Outlook** in the sequential application. If split applications are made, maintain a minimum of 14 days between sequential applications. **DO NOT** apply more than a total of 21 fl ozs/A of **Outlook** in a single growing season.

A total maximum combined rate of 21 fl ozs/A of **Outlook** may be applied on any soil type in a single growing season.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

Crop-specific Restrictions

- **Preharvest Interval** (PHI): 30 days

Dry Bulb Onions, Garlic, Dry Bulb Shallots Tank Mixes

Crop injury is possible when tank mixing other herbicides as well as any adjuvants such as methylated seed oils with **Outlook® herbicide**. Read and follow the applicable **Crop-specific Restrictions** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Fallow

Outlook may be used as a residual treatment to control listed weeds before they germinate at the beginning of the fallow period. Specific rotational crop planting intervals must be observed between an application of **Outlook** and planting of the following crops (see **Crop Rotation Intervals** section).

Application Rate and Timing

Apply **Outlook** as a broadcast spray at up to 21 fl ozs/A before weeds emerge for best product performance.

Split applications may be made with a minimum of 30 days between applications; but **DO NOT** exceed the maximum seasonal cumulative amount of 21 fl ozs/A of **Outlook** per cropping season.

Green Onions (Leeks, Spring onions or Scallions, Japanese bunching onions, Green shallots or Eschalots)

Use not permitted in California on green onions.

Outlook may be used as part of a weed management program in green onions grown in muck soils, high organic soils, and mineral soils. **Outlook** may only be applied by ground (broadcast) application.

Apply **Outlook** after green onions have reached the 2 true-leaf stage until a minimum of 30 days before harvest. Application made before 2 true-leaf stage may result in significant crop injury including possible stand reduction. If applications are made to transplanted green onions, **DO NOT** apply until transplants are in the ground and soil has settled around transplants with several days to recover.

Outlook may be applied in a single application of up to 21 fl ozs/A or used in split applications of 10 to 14 fl ozs/A of **Outlook** applied initially, and the remaining 7 to 11 fl ozs/A of **Outlook** in the sequential application. If split applications are made, maintain a minimum of 14 days between sequential applications. **DO NOT** apply more than a total of 21 fl ozs/A of **Outlook** in a single growing season.

Crop-specific Restrictions

- **Preharvest Interval** (PHI): 30 days

Green Onion Tank Mixes

Outlook application may be made before, in tank mixture, or after use of registered herbicides for postemergence use in green onions.

Crop injury is possible when tank mixing herbicides as well as any adjuvants such as methylated seed oils with **Outlook**. Read and follow the applicable **Crop-specific Restrictions** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Hops

Use not permitted in California on hops.

Outlook may be used as part of a weed management program in baby (first year planting) and established hops. **Outlook** may only be applied by **ground (banded) application** (including postemergence-directed). Contact with hop foliage or cones by spray mixture or drift may cause injury. Apply **Outlook** preemergence to weeds when hops are in the dormant or early vegetative stages of growth.

Outlook may only be applied in single application.

Outlook has not been tested on hops grown in all soil textures. Refer to **Table 2** for soil texture group descriptions and appropriate application rates. BASF recommends testing **Outlook** on a small portion of the target crop to confirm safety in the local soil type.

Depending on application timing, **Outlook** may negatively impact growth of cover crops planted in the fall after harvest.

Crop-specific Restrictions

- **DO NOT** apply to hops by air or through any type of irrigation system.
- **DO NOT** apply more than 21 fl ozs/A of **Outlook** per season.
- **Preharvest Interval** (PHI): 60 days

Tank Mixes

Tank mixes with other herbicides, fungicides, insecticides, and fertilizers are not advised when using this product in hops.

Peanut

Use not permitted in California on peanut.

Outlook may be applied preplant surface, preplant incorporated, preemergence, or postemergence (up to 80 days before harvest) alone or in tank mix combination. Use higher rates (16 to 21 fl ozs/A of **Outlook**) for improved control or suppression of difficult weeds like yellow nutsedge, Florida beggarweed, eclipta, common ragweed, and other broadleaf species.

Refer to **Table 2** for specific maximum application rates of **Outlook® herbicide** depending on soil type and organic matter content.

Outlook may be applied in a single application of up to 21 fl ozs/A or used in split applications of 10 to 14 fl ozs/A of **Outlook** applied initially, and the remaining 7 to 11 fl ozs/A of **Outlook** in the sequential application. **DO NOT** apply more than 21 fl ozs/A of **Outlook** per season.

Crop-specific Restrictions

- Peanut hay or straw may be grazed or fed to livestock 80 days or more after application of **Outlook**.

Perennial Grass grown for Seed

For use on perennial grass grown for seed only in states west of the Mississippi River.

Outlook may be used as part of a weed management program in established stands of cool-season and warm-season perennial grass grown for seed. Grass seed crops must have been established for at least one year or had at least one seed crop harvested before **Outlook** use.

The grass seed screenings remaining after processing and grass straw remaining after seed harvest may be grazed by or fed to livestock.

Outlook applied as directed will provide preemergence control or suppression of volunteer seedlings from previous grass seed crops in addition to many annual grass weeds, annual broadleaf weeds, and sedge listed in **Table 1**.

In cool-season perennial grass, apply 14 to 21 fl ozs/A of **Outlook** to postharvest grass during regrowth in the fall or spring before emergence of targeted weeds. **Outlook** may be applied in a sequential use program with other herbicides that control emerged weeds. Application to perennial ryegrass and fine fescue stands under stress may cause crop injury.

In warm-season perennial grass, apply 14 to 21 fl ozs/A of **Outlook** to postharvest grass during the fall, or during winter dormancy, or after the first seed harvest/cutting. **DO NOT** apply to warm-season perennial grass after greenup in the spring before the first seed harvest/cutting. **Outlook** may be applied in a sequential use program with other herbicides that control emerged weeds.

In both cool-season and warm-season perennial grass, use the higher rate in the rate range where more dense infestations of targeted annual grass weeds, annual broadleaf weeds, or sedge are expected. Grass straw from the previous harvest must be removed, burned, or evenly spread before **Outlook** application or reduced weed control may result.

For effective control or suppression of annual grass weeds, annual broadleaf weeds, sedge, or volunteer seedlings from previous grass seed crops, this product must be moved into the upper soil surface where weed seeds germinate by rainfall or irrigation before weed emergence. Application made in periods of cold temperature that temporarily limit normal crop growth or in extended cold temperature periods that initiate winter dormancy in grass crops may result in crop injury.

Outlook may be tank mixed with other herbicides labeled for use in perennial grass grown for seed. BASF recommends testing **Outlook** tank mixes on a small portion of the target crop to determine if damage is likely to occur. **Physical incompatibility, reduced weed control, or crop injury may result from mixing Outlook with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.** Subsequent application of postemergence herbicides may cause crop injury. Consult with your local BASF dealer regarding local tank mix options.

Crop-specific Restrictions

- **DO NOT** apply a total of more than 21 fl ozs/A of **Outlook** per growing season.
- From treated fields of cool-season perennial grass, forage and hay may be grazed by or fed to livestock 60 days after application.
- From treated fields of warm-season perennial grass, forage and hay may be grazed by or fed to livestock 30 days after application.

Potato and Horseradish

Use not permitted on horseradish in California.

Outlook may be used as part of a weed management program in horseradish and potato.

In potato, apply **Outlook** preemergence (after planting or after drag-off). In horseradish, apply **Outlook** postemergence from the 2-leaf stage to the 8-leaf stage of plant development. **Outlook** may only be applied in a single application in horseradish and potato.

In cold and wet growing conditions, **Outlook** application may result in delayed emergence or early season stunting of horseradish and potato.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content. **DO NOT** exceed the specified rate by soil type and organic matter content in a single application.

Crop-specific Restrictions

- **Preharvest Interval** (PHI): 40 days

Sorghum (Grain)

Outlook® herbicide may be used preplant surface, preplant incorporated, preemergence, or postemergence to grain sorghum up to 12-inches tall. Single or split application may be used.

Outlook is not registered for use on sweet or forage sorghum.

All **Outlook** applications must only be made to sorghum seed that has been properly treated by the seed company with an approved chloroacetamide herbicide safener or severe injury may occur.

Under high soil moisture or cool conditions, **Outlook** application may cause temporary stunting or leaf wrapping of sorghum. Sorghum will normally outgrow these symptoms in 10 to 14 days.

For best performance, make preemergence surface application within 5 days of the last preplant tillage. If weeds have emerged, apply **Outlook** with herbicides to control emerged vegetation.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

Crop-specific Restrictions

- Sorghum forage may be grazed or fed to livestock 60 days or more after application of **Outlook**.
- **Preharvest Interval** (PHI) for grain and fodder: 80 days
- **DO NOT** apply preplant incorporated in California.

Soybean

Use not permitted in California on soybean.

Outlook may be applied preplant surface, preplant incorporated, preemergence, or postemergence [from emergence (cracking stage) to fifth-trifoliate leaf stage] to soybean.

If **Outlook** is applied preplant incorporated, incorporation must be uniform and shallow (upper 1 to 2 inches of soil). Deeper incorporation may reduce weed control or increase the potential for crop injury. Preplant incorporated treatments are not for use on coarse soils with less than 1.5% organic matter.

If extreme conditions of high rainfall and extended periods of water-saturated soil occur during soybean germination or early seedling development, **Outlook** use may result in temporary growth suppression.

Temporary soybean burn and/or stunting may occur with postemergence applications of **Outlook**. Tank mixtures with other herbicides and/or spray adjuvants may increase the level of crop injury. Crop injury is typically transient and has not resulted in reduced soybean yield potential.

Outlook may be applied in a single application or two split applications.

Refer to **Table 2** for specific maximum application rates of **Outlook** depending on soil type and organic matter content.

If **Outlook** is applied only as a single application, **DO NOT** apply more than 21 fl ozs/A. If **Outlook** is applied in two split applications, maintain a minimum of 14 days between split applications, and **DO NOT** exceed a seasonal total of 24 fl ozs/A of **Outlook**. If two applications are made, apply no more than 8 to 16 fl ozs/A during the first application (applied preplant, preemergence, or postemergence); then apply the remainder (8 to 16 fl ozs/A) of the seasonal maximum rate during the second application (postemergence).

Crop-specific Restrictions

- **DO NOT** graze or feed forage, hay, or straw to livestock.

Winter Squash

For use only in Oregon and Washington.

Outlook may be used as part of a weed management program in winter squash **(Golden Delicious variety only)**.

Outlook may only be applied by **ground (broadcast) application**.

Apply **Outlook** as a **preemergence surface application**. Broadcast the treatment uniformly to the soil surface after planting and before crop and weed emergence. If extreme conditions of high rainfall and extended periods of water-saturated soil occur during winter squash germination or early seedling development, **Outlook** use may result in growth suppression, which may reduce yields.

Outlook may only be applied in single application.

Apply a minimum of 12 to 14 fl ozs/A of **Outlook** on soils with less than 3% organic matter. Apply a minimum of 16 to 18 fl ozs/A on soils with greater than 3% organic matter. **DO NOT** apply more than 21 fl ozs/A of **Outlook** on any soil in a single application.

Crop-specific Restrictions

- **DO NOT** apply to winter squash by air or through any type of irrigation system.
- **DO NOT** apply when conditions favor drift to adjacent susceptible vegetation.
- **DO NOT** apply more than 21 fl ozs/A of **Outlook** per year in winter squash.
- **Preharvest Interval** (PHI): 90 days

Tank Mixes

Tank mixes with other herbicides or insecticides are not advised when using this product in winter squash.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF Agricultural Solutions US LLC ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF. 1108

Outlook *is a registered trademark of BASF.*

Dual II Magnum *and* ***Dual Magnum*** *are registered trademarks of a Syngenta Group Company.*

Dual Magnum® herbicide (s-metolachlor),
EPA Reg. No. 100-816

Dual II Magnum® herbicide (s-metolachlor),
EPA Reg. No. 100-818

© 2025 BASF Agricultural Solutions US LLC
All rights reserved.

007969-00156.20250206.**NVA 2024-04-0086-0333**
Based on: NVA 2018-04-086-0016
Supersedes: NVA 2019-04-086-0243

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

We create chemistry