BASF
We create chemistry

Dimethenamid-P	Group	15	Herbicide
Topramezone	Group	27	Herbicide

Armezon® PRO

Herbicide

For weed control in all corn types including field, seed, and sweet corn, and popcorn

Active Ingredients*:

topramezone: [3-(4,5-dihydro-isoxazolyl)-2-methyl-4-(methylsulfonyl) phenyl](5-hydroxyl-1-methyl-1*H*-pyrazol-4-yl)methanone	1.12%
dimethenamid-P: (S)-2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide	56.25%
Other Ingredients:**	42.63%
Total:	100.00%

* Contains 0.1 pound of topramezone per gallon and 5.25 pounds of dimethenamid-P per gallon
** Contains petroleum distillates

EPA Reg. No. 7969-372 **EPA Est. No.**

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

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 swallowed	• Immediately call a poison control center or doctor. • **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 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. • Call a poison control center or doctor for 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

CAUTION. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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 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.

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 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:

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

Environmental Hazards

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. Apply this product only as directed on the label.

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are

permeable, particularly where the water table is shallow, may result in groundwater contamination.

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

Groundwater and Surface Water Protection

Point-source Contamination. To prevent point-source contamination, **DO NOT** mix or load this 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. **DO NOT** apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas 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% 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 mixtures or rinsate

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

Movement by Surface 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 in areas with high potential for groundwater contamination. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. **DO NOT** apply to soils classified as sand with less than 3% organic matter and where groundwater depth is shallow (30 ft or less). To minimize the possibility of groundwater contamination, carefully follow the specified rates as affected by soil type in the **Application Instructions** section of this label.

Movement by Water Erosion of Treated Soil. DO NOT apply this product through any type of irrigation system including sprinkler, drip, flood, or furrow irrigation. Ensure treated areas have received at least 1/2-inch of rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

Endangered Species

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 (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, all applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed. 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 intervals. The requirements in this box only apply to uses of this product that are covered by the WPS.

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 worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Protective eyewear

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides.

Pesticide Disposal

Wastes resulting from this product must be disposed of on-site or at an approved waste disposal facility. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under **Subtitle C** of the **Resource Conservation and Recovery Act**. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law.

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.

(continued)

STORAGE AND DISPOSAL *(continued)*

Container Handling *(continued)*

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.

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

Armezon® PRO herbicide is an emulsifiable concentrate (EC) herbicide that provides preemergent control or suppression and systemic postemergence control or growth suppression of emerged broadleaf and grass weeds followed by soil residual control in field corn (grown for grain, silage, or seed), popcorn (grown for ear, kernel, or seed), and sweet corn (grown for ear, kernel, or seed); refer to **Table 1** for weeds controlled or suppressed). This product may be used on conventional and herbicide-resistant/tolerant corn hybrids (**Clearfield®**, **Roundup Ready®**, and **LibertyLink®**). BASF has not tested all inbred lines for tolerance to **Armezon PRO**. Before using **Armezon PRO**, refer to seed company recommendations for use on inbred lines of field corn, popcorn, and sweet corn.

To increase weed control spectrum, tank mix **Armezon PRO** with additional herbicides registered for use in corn. Refer to **Crop-specific Information** section for recommendations on herbicide tank mixes or sequential programs.

Armezon PRO postemergent applications must include spray additives; see **Additives** for details.

Rainfast period - **Armezon PRO** is rainfast 1 hour after application. Postemergence activity may be reduced if rain or irrigation occurs within 1 hour of application.

Table 1. Armezon® PRO herbicide will control or suppress the following weeds including ALS-resistant[1], glyphosate-resistant, and triazine-resistant biotypes.

Common Name	Scientific Name	Level of Control C = Control S = Suppression		Height or Diameter (inches)[1]
		Preemergence/ Residual	Postemergence	Postemergence
Broadleaf Weeds				
Amaranth, Palmer[2]	*Amaranthus palmeri*	C	C	4
Amaranth, Powell	*Amaranthus powellii*	C	C	4
Burcucumber	*Sicyos angulatus*	—	C	4
Canola, volunteer	*Brassica* spp.	—	C	4
Carpetweed	*Mollugo verticillata*	C	C	4
Chamomile, mayweed	*Anthemis cotula*	C	—	—
Chickweed, common	*Stellaria media*	—	C	2
Cocklebur, common	*Xanthium strumarium*	—	C	5
Dandelion	*Taraxacum officinale*	—	S	4
Galinsoga, hairy	*Galinsoga ciliata*	—	C	4
Henbit	*Lamium amplexicaule*	—	C	3
Horseweed (Marestail)	*Conyza canadensis*	—	C	4
Jimsonweed	*Datura stramonium*	—	C	4
Kochia	*Kochia scoparia*	—	C	4
Lambsquarters, common	*Chenopodium album*	S	C	4
Lettuce, prickly	*Lactuca serriola*	—	C	2
Mallow, common	*Malva neglecta*	—	C	2
Mallow, Venice	*Hibiscus trionum*	—	S	2
Morningglory spp.	*Ipomoea* spp.	—	S	4
Mustard	*Brassica* spp.	—	C	4
Nightshade, black	*Solanum nigrum*	C	C	4
Nightshade, Eastern black	*Solanum ptychanthum*	C	C	4
Nightshade, hairy	*Solanum sarrachoides*	C	C	4
Pigweed, prostrate	*Amaranthus blitoides*	C	C	4
Pigweed, redroot	*Amaranthus retroflexus*	C	C	4
Pigweed, smooth	*Amaranthus hybridus*	C	C	4
Pigweed, tumble	*Amaranthus album*	C	C	2
Purslane, common	*Portulaca oleracea*	C	—	—
Pusley, Florida	*Richardia scabra*	C	C	2
Ragweed, common	*Ambrosia artemisiifolia*	S	C	4
Ragweed, giant	*Ambrosia trifida*	—	C	5
Shepherd's purse	*Capsella bursa-pastoris*	—	C	2
Sida, prickly (Teaweed)	*Sida spinosa*	—	C	2
Smartweed, ladysthumb	*Polygonum persicaria*	—	C	2
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	—	C	2
Spurge, nodding	*Chamaesyce nutans*	C	—	—
Spurge, spotted	*Chamaesyce maculata*	C	—	—

(continued)

Table 1. Armezon® PRO herbicide will control or suppress the following weeds including ALS-resistant[1], glyphosate-resistant, and triazine-resistant biotypes. *(continued)*

Common Name	Scientific Name	Level of Control C = Control S = Suppression		Height or Diameter (inches)[1]
		Preemergence/ Residual	Postemergence	Postemergence
Broadleaf Weeds *(continued)*				
Sunflower, volunteer	*Helianthus* spp.	—	C	5
Sunflower, wild (common)	*Helianthus annuus*	—	C	5
Thistle, Canada	*Cirsium arvense*	—	S	4
Thistle, Russian	*Salsola iberica*	—	C	2
Velvetleaf	*Abutilon theophrasti*	—	C	4
Waterhemp, common	*Amaranthus rudis*	C	C	4
Waterhemp, tall[2]	*Amaranthus tuberculatus*	C	C	4
Grass Weeds				
Barnyardgrass	*Echinochloa crus-galli*	C	C	4
Bluegrass, annual	*Poa annua*	C	—	—
Bluegrass, roughstalk	*Poa trivialis*	C	—	—
Brome, California	*Bromus carinatus*	C	—	—
Brome, downy	*Bromus tectorum*	C	—	—
Crabgrass, large	*Digitaria sanguinalis*	C	C	3
Crabgrass, smooth	*Digitaria ischaemum*	C	C	3
Cupgrass, southwestern	*Eriochloa gracilis*	C	—	—
Cupgrass, woolly	*Eriochloa villosa*	S	S	3
Fescue, rattail	*Vulpia myuros*	C	—	—
Foxtail, giant	*Setaria faberi*	C	C	4
Foxtail, green	*Setaria viridis*	C	S	3
Foxtail, yellow	*Setaria lutescens*	C	S	3
Goosegrass	*Eleusine indica*	C	C	3
Johnsongrass (seedling)	*Sorghum halepense*	S	S	4
Millet, wild proso	*Panicum miliaceum*	S	C	3
Panicum, fall	*Panicum dichotomiflorum*	C	S	3
Panicum, Texas	*Panicum texanum*	S	—	—
Red rice	*Oryza sativa*	C	—	—
Ryegrass, Italian[2]	*Lolium multiflorum*	C	—	—
Sandbur	*Cenchrus* spp.	S	—	—
Shattercane	*Sorghum bicolor*	S	S	4
Signalgrass, broadleaf	*Brachiaria platyphylla*	S	S	3
Witchgrass	*Panicum capillare*	C	—	—
Sedges				
Flatsedge, rice	*Cyperus iria*	C	—	—
Nutsedge, yellow	*Cyperus esculentus*	C	—	—

[1] For best performance, spray before weeds exceed the height or diameter listed in **Table 1**.

[2] Populations of noted weeds exist that are known to be resistant to **Group 27** herbicides. **Armezon PRO** may not provide full-season control of these herbicide-resistant biotypes. See **Resistance Management** section for practices to manage and minimize the impact of resistant weeds (e.g. tank mix or alternate with other herbicide sites of action, crop rotation, and mechanical control).

Product Stewardship Requirements

- Apply **Armezon® PRO herbicide** postemergence to weeds 4 inches or less in size for best performance.
- Apply **Armezon PRO** at the labeled rate.
- Use **Armezon PRO** as part of a herbicide program that includes the use of residual herbicides and herbicides with alternate sites of action to reduce resistance selection pressure.
- Select nozzles that produce coarse to very coarse spray droplets.
- Maintain boom height 24 inches or less from target.
- Identify areas of sensitive nontarget plants and maintain proper setback distance from these areas.
- Thoroughly clean spray equipment after application.

Mode of Action

Armezon PRO contains two active ingredients: topramezone and dimethenamid-P. Topramezone is readily absorbed by leaves, roots, and shoots; translocates throughout the plant; and accumulates in areas of active growth to provide postemergence control of emerged weeds. Dimethenamid-P is a root-and-shoot growth inhibitor that controls susceptible germinating seedlings before or soon after they emerge from the soil. Topramezone controls weeds by inhibiting carotenoid biosynthesis (HPPD-inhibitor **Group 27**); dimethenamid-P is a chloroacetamide herbicide that inhibits very long chain fatty acid production (cell division inhibitor **Group 15**).

Contact your local BASF representative, crop advisor, or extension agent to find out if suspected resistant weeds to these modes of action have been found in your region. **DO NOT** assume that each listed weed is being controlled by both modes of action provided by this product. Some weeds may be controlled by only one of the active ingredients in this product.

Temperatures and moisture conditions for active plant growth are important for optimum **Armezon PRO** activity. **Armezon PRO** application to weeds during periods of stress conditions, such as cold temperatures and/or drought, may result in reduced performance.

Resistance Management

While weed resistance to **Group 27** or **Group 15** herbicides is infrequent, populations of resistant biotypes are known to exist. Resistance management should be part of a diversified weed control strategy that integrates multiple options including chemical, cultural, and mechanical (tillage) control tactics. Cultural control tactics include crop rotation, proper fertilizer placement, optimum seeding rate/row spacing, maintained field borders and timely tillage. Consult your local BASF representative, state cooperative extension service, professional consultants, or other qualified authority to determine appropriate actions if you suspect resistant weeds.

Chemical Control

- Start clean with tillage or an effective burndown herbicide program.
- **DO NOT** rely on a single herbicide site of action for weed control during the growing season.
- Follow labeled application rate and weed growth stage specifications.
- Avoid application of herbicides with the same site of action more than twice a season.
- Use tank mixes and sequential applications with other herbicides possessing different sites of action that are also effective on target weeds.

Scouting and Containment

- 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.
- Scout fields after herbicide application to identify areas where weed control was ineffective.
- Suspected herbicide-resistant weeds may be identified by failure to control a weed species normally controlled by the herbicide at the rate applied, especially if control is achieved on adjacent weeds; also by a spreading patch of uncontrolled weeds of a given species and surviving plants mixed with controlled plants of the same species.
- Control weed escapes with herbicides possessing a different site of action or use a mechanical control measure. **DO NOT** allow weed escapes to reproduce by seed or to proliferate vegetatively. Contact your **Armezon PRO** supplier and/or your local BASF representative to report weed escapes.
- Clean equipment before moving to a different field to avoid spread of resistant weeds.

Crop Tolerance

Crops growing under normal environment conditions are tolerant to **Armezon PRO** when applied according to label directions. Crop injury may occur under stressful growing conditions (e.g. low soil fertility, seedling disease, extreme hot or cold weather, excessive moisture, high soil pH, high soil salt concentration, drought). Rarely, plants under these conditions treated with **Armezon PRO** may show transient bleaching of the portion of the leaves intercepting the spray application. Necrosis can also occur typically in warm, humid conditions. Use of additional tank mix herbicides and/or oil-type adjuvants may increase the potential for necrosis. These symptoms are transient and occur infrequently; crop growth is typically not affected.

Insecticide Information

Armezon PRO may be used sequentially or in combination with soil-applied or foliar-applied insecticides registered for use in corn.

Application Instructions

Armezon PRO can be applied preemergence or postemergence. For application to emerged weeds apply to actively growing weeds as a band or broadcast application to provide postemergence control of emerged weeds as well as residual control of germinating weed seeds. Apply **Armezon PRO** by air or ground depending on

crop-specific use; refer to **Crop-specific Information** section for application restrictions.

Make postemergence applications of **Armezon® PRO herbicide** when weeds are small and actively growing. An adjuvant is required with **Armezon PRO** for postemergence activity; refer to **Additives** section for details. Emerged susceptible weeds may take 3 to 4 weeks to completely die. **Armezon PRO** provides residual control of susceptible weeds. Postemergence activity may be slowed or reduced under cloudy and/or foggy or cooler weather conditions, or when weeds are growing under drought or other stress conditions. When targeting dense weed populations and/or larger broadleaf weeds, use higher spray volumes and a higher application rate within an application rate range.

Cultivation can be used to add diversity to a weed management program by removing partially controlled weeds or additional weed flushes, but delayed until 7 days after applying **Armezon PRO** postemergence to allow sufficient time for herbicide absorption and translocation.

If activating rainfall is not received within 1 week after application of **Armezon PRO**, residual weed control may be reduced.

If native plant communities exist within 30 feet downwind of the application, a 30-foot downwind spray buffer must be maintained between the application and those native plant communities.

The applicator is responsible for any loss or damage that results from spraying **Armezon PRO** in a manner other than directed in this label. Refer to **Application Methods and Equipment** section for additional off-target spray mitigation instructions. In addition, applicators must follow all applicable state and local regulations and ordinances for spraying.

Applications Rate

Always read and follow crop-specific use directions.

Table 2. Application Rate to Control or Suppress Target Weed by Soil Texture[1,2]

Soil Texture	Organic Matter Content	
	Less than 3%* (fl ozs/A)	**3% or more** (fl ozs/A)
Coarse	14 to 16	16 to 20
Medium Fine	16 to 20	20 to 24

[1] Soil texture groups 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).

[2] Use **Armezon PRO** at no more than 20 fl ozs/A for all soil types in seed corn, sweet corn, and popcorn

* **DO NOT** apply to sand-texture soil with less than 3% organic matter (as determined by soil tests, if not known) where depth to groundwater is 30 feet or less.

Application Methods and Equipment

Armezon PRO may be applied by air and/or ground depending on use; consult **Crop-specific Information** section of this label for any crop-specific application method restrictions. Thorough spray coverage is essential for best weed control and can be improved with proper adjuvant, nozzle, and spray volume selection.

Calibrate application equipment for accurate target spray volume and application rate to ensure uniform distribution of spray and to avoid spray drift to nontarget areas. Adjust equipment to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that increase rates above the labeled use rates.

Aerial Application

Use 2 to 10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation. **DO NOT** apply when conditions favor drift from target area.

Ground Application

Banding

When applying **Armezon PRO** by banding, use the following formula to calculate the amount of herbicide and water volume needed:

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

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

Broadcast

Unless noted in the **Crop-Specific Information** section, use a spray volume of 10 or more gallons of water per treated acre. Thorough coverage of existing vegetation is essential for postemergence applications; higher spray volumes may be necessary for optimum performance.

Cleaning Spray Equipment

To avoid injury to sensitive crops, drain and clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions. Triple rinse equipment before and after applying this product.

Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The spray system and weather-related factors determine the potential for spray drift. The applicator is responsible for considering these factors when making application decisions to avoid spray drift onto non-target areas.

Applicators must follow application requirements to avoid spray drift hazards, including those found in this labeling and applicable state and local regulations and ordinances.

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

All application equipment must be properly maintained and calibrated using appropriate carriers.

The applicator must be familiar with all factors that affect spray drift. The information covered in the following spray drift reduction review must be considered before application.

Controlling Droplet Size

The most effective way to reduce drift potential is to use nozzles that produce large spray droplets. However, applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind**; **Temperature and Humidity**; and **Temperature Inversions**).

- **Volume** - Use high flow rate (large orifice) nozzles to apply the highest practical spray volume. Nozzles with higher flow rates generally 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 (larger orifice) nozzles instead of increasing pressure. Ensure sprayer rate controller hardware (if so equipped) does not allow pressure increases above the desired range.
- **Temperature and Humidity** - Low humidity and high temperatures increase the evaporation of water from spray, reducing droplet size and increasing potential for spray drift. Avoid spraying during conditions of low humidity and high temperatures. Configure equipment to produce larger droplets to compensate for evaporation when applying in hot and dry conditions. Larger droplets have a lower surface-to-volume ratio and are impacted less by temperature and humidity.

Temperature Inversions

DO NOT apply **Armezon® PRO herbicide** when temperature inversions exist. Temperature inversions increase drift potential because fine droplets may remain suspended in the air longer after application. Suspended droplets 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. Inversions begin to form as the sun sets and often continue into the morning before surface warming. Their presence can be indicated by ground fog, smoke not rising, dust hanging over a road, or presence of dew or frost. Smoke that layers and moves laterally (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Inversion conditions typically dissipate with increased winds (above 3 MPH) or when surface air begins to warm (3° F from morning low).

Sensitive Areas

Armezon PRO must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or sensitive crop plants) is minimal (e.g. when the wind is blowing away from sensitive areas). Applicators should survey the surrounding area and consult sensitive crop registries, if available, before applying **Armezon PRO**.

Wind Speed and Direction

Measure wind speed at the boom height. **DO NOT** apply **Armezon PRO** when wind speed exceeds 10 miles per hour.

Aerial Application Spray Drift Management

Applicators must follow these requirements to avoid off-target drift movement from aerial applications to agricultural field crops.

- **Nozzle Type** - Use a nozzle type designed for aerial 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 lowest drift.
- **Nozzle Orientation and Location** - Nozzles must always point backward parallel with the airstream and never point downward more than 20 degrees. Significant deflection from horizontal will reduce droplet size and increase drift potential. The distance of the outermost nozzles on the boom must not exceed 75% of the length of the wingspan or 90% of rotor-blade diameter.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Application Height** - Without compromising aircraft safety, make applications at a height of 10 feet or less above the ground, crop canopy or tallest plants.

Ground Application Spray Drift Management

- **Nozzle Type** - Correct nozzle selection is one of the most important parameters in drift reduction. Use nozzles that minimize the production of fine spray droplets less than 150 microns. Apply **Armezon PRO** using nozzles that deliver **coarse** to **very coarse** spray droplets (volume median diameter of 220 microns or more) as defined by ASABE standard S572.1, and as shown in the nozzle manufacturer's catalog. Select nozzles that deliver a minimum flow rate of 0.3 gallons per minute at a pressure of 40 PSI (see nozzle manufacturer's catalog). Venturi-type nozzles are particularly suited to deliver droplet spectrums with these parameters.
- **Boom Height** - **DO NOT** allow boom height to be more than 2 feet above the target. Decreasing the boom height reduces exposure of droplets to environmental conditions like evaporation and wind. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle-to-target height.
- **Hooded Spray Booms** - Hooded spray booms are another tool that can be used to minimize spray drift potential. **Armezon PRO** may be applied using a hooded spray boom; however, applications still must adhere to other ground application requirements in this label.

- **Equipment Ground Speed** - Slower speeds generally result in better spray coverage and deposition on the target area.

Additives

Postemergence applications of **Armezon® PRO herbicide** require addition of an adjuvant and a nitrogen fertilizer source to achieve optimum weed control. BASF recommends the use of Chemical Producers and Distributors Association (CPDA) certified adjuvant.

Adjuvants

- **Armezon PRO Alone** - Use methylated seed oil (MSO) or petroleum-based or vegetable seed-based oil concentrate (COC, HSOC) with **Armezon PRO**. Apply these oil-based adjuvant concentrates at 0.5 to 1.0 gallon per 100 gallons of water [0.5% to 1.0% volume/volume (v/v)]. Use the higher rate when applying during periods of hot, dry weather.

  Use of oil-type adjuvants (COC, HSOC, and MSO) increases the potential for necrosis a few days after treatment and occasionally crop height reduction.

OR

- **All Tank Mixtures** - Use nonionic surfactant (NIS) at 0.25 to 0.5 gallon per 100 gallons of water [0.25% to 0.5% volume/volume (v/v)] with **Armezon PRO**. Use the higher rate when making an application during periods of hot, dry weather.

  Oil-type adjuvants (COC, HSOC, and MSO) may be used in tank mixtures with **Armezon PRO**. However, combinations with these adjuvants can cause elevated necrosis within a few days after treatment and occasionally crop height reduction. Oil-type adjuvants are not recommended when tank mixing with atrazine.

AND

Nitrogen Fertilizer

Recommended nitrogen-based fertilizers include urea ammonium nitrate (UAN; 28% or 34%) at 1.25 to 2.5 gallons per 100 gallons of water (1.25% to 2.5% v/v). Instead of liquid fertilizer, spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 to 17 pounds per 100 gallons of water may be used. Use the higher rate when applying during periods of hot, dry weather.

Deposition Aids

Agriculturally approved drift-reducing additives may be used in applications with **Armezon PRO**. Not all deposition aids are compatible with every nozzle type and pesticide/adjuvant combination. Check with the additive manufacturer to ensure the deposition aid will work properly with the spray nozzle, spray pressure, and your specific spray solution. Use of a deposition aid does not replace the need for proper nozzle selection (see **Ground Application Spray Drift Management** section).

Mixing Instructions

Tank Mixing Information

Armezon PRO may be tank mixed with one or more registered herbicide products according to the specific tank mixing instructions in this label and respective product labels. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for the specific crop use; follow required rotational crop restrictions. Read and follow the applicable restrictions and limitations and **Directions For Use** on all product labels involved in tank mixing. Always follow the most restrictive label use directions; refer to **Crop-Specific Information** section for details.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

1. For 20 gallons per acre 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.
2. Add components in the sequence indicated in the following mixing order instructions using 2 teaspoons for each pound or 1 teaspoon for each pint of labeled use rate per acre.
3. Cap the jar and invert 10 cycles between component additions.
4. When the components have all been added to the jar, let the solution stand for 15 minutes.
5. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface; 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.

Tank Mixing Instructions

DO NOT use liquid fertilizer as a carrier for postemergence applications. Use only water as a carrier.

Maintain continuous and constant agitation throughout mixing and application until spraying is completed.

1. **Water** - Begin by agitating a thoroughly clean sprayer tank 1/2 to 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-soluble additives** (including dry and liquid fertilizers such as AMS or UAN)

5. **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
6. **Water-soluble products and additives**
7. **Emulsifiable concentrates** (including **Armezon® PRO herbicide** and methylated seed oil adjuvants)
8. **Remaining quantity of water**

Maintain continuous and constant agitation throughout mixing and application until spraying is completed. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

It is the pesticide user's responsibility to ensure that all products in the mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Restrictions

- **Maximum seasonal use rate** - **DO NOT** apply more than 28 fl ozs/A of **Armezon PRO** (0.022 lb topramezone per acre; 1.125 lbs dimethenamid-P per acre) per year.
- **DO NOT** use liquid fertilizer as a carrier for postemergence applications.
- **DO NOT** contaminate irrigation ditches or water used for domestic purposes.
- **DO NOT** apply **Armezon PRO** through any type of irrigation system (e.g. chemigation).

Crop Rotation Restrictions

Use the following information to determine the proper interval between **Armezon PRO** application and rotational crop planting as well as replanting after crop failure because of environmental factors such as drought, frost, or hail. Determine the rotational crop interval for tank mix products and use the most restrictive interval of all products applied.

Table 3. Crop Rotation Restrictions by Application Rate

Crop	**Armezon PRO** (fl ozs/A)		
	14 to 20	**21 to 25**	**26 to 28**
	Rotational Crop Interval (months after application)		
Corn (all)	0	0	0
Cereal grains	4	4	4
Alfalfa	9	9	9
Cotton	9	9	9
Grain sorghum	9	9	9
Grass grown for seed	9	9	9
Peanut	9	9	9
Potato	9	9	9
Rice	9	9	9
Soybean	9	9	9
Sugarcane	9	9	9
Sunflower	9	9	9
Canola	9	9	18
Dry beans[1]	9	9*	18**
Pea	9	9*	18**
Snap/Garden bean	9	9*,†	18**
Sugarbeet	9*	9*	18**
Lima bean, succulent	9	18	18
All other crops	18	18	18

[1] For cranberry bean in Idaho, Utah, and the area east of the Cascade Mountains in Oregon and Washington, follow the guidelines for snap/garden bean.

* **18 months for the following states:** Colorado, Michigan, Minnesota, Montana, Nebraska (west of Highway 83), North Dakota, South Dakota, Wisconsin, and Wyoming

** **9 months for the following states:** Idaho, Oregon, and Washington

† 18 months for Idaho, Utah, and the area east of the Cascade Mountains in Oregon and Washington.

Crop-specific Information

This section provides use directions for **Armezon® PRO herbicide** in specific crops; read product information, application instructions, weeds controlled, and additive instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions, and rotational crop restrictions.

Depending on specific crop application directions, **Armezon PRO** may be applied for postemergence control of emerged broadleaf weeds and/or residual control of germinating broadleaf weed seeds before crop planting (preplant and/or preseed) and after planting (preemergence, postemergence). Refer to **Table 1** for list of weeds controlled or suppressed.

Corn (field corn, popcorn, seed corn, sweet corn)

Armezon PRO may be applied to all corn types including conventional, **Clearfield®**, **Roundup Ready®**, and **LibertyLink®** hybrids from corn emergence to 8-leaf stage or 30-inches tall corn. In addition, **Armezon PRO** may be applied on inbred lines used in field corn, popcorn, and sweet corn seed production. Refer to seed company recommendations before use on inbred lines.

Armezon PRO may be used in tank mixes or sequential applications with other herbicides registered for use in corn. If **Armezon PRO** is tank mixed with other herbicides, follow label restrictions for the most restrictive tank mix product.

Application Rate

Armezon PRO application rates vary by soil texture and organic matter (refer to **Table 2**). 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). Applying **Armezon PRO** at rates lower than those listed in **Table 2** will result in reduced weed control and increase the potential for herbicide resistance development. See **Resistance Management** section of this label for additional information.

Use **Armezon PRO** at no more than 20 fl ozs/A for all soil types in popcorn, seed corn, and sweet corn.

Up to 2 applications of **Armezon PRO** may be made during a growing season. Sequential applications must be separated by 2 weeks or more and must not exceed more than a cumulative amount of 28 fl ozs/A of **Armezon PRO**. See **Sequential Herbicide Combinations and Uses** for additional information.

DO NOT apply to sand-texture soil with less than 3% organic matter (as determined by soil tests, if not known) where depth to groundwater is 30 feet or less.

Application Timing

- **Field Corn and Popcorn** - **Armezon PRO** may be applied from corn preemergence to V8 stage or 30-inches tall corn. For applications when corn is more than 12-inches tall but before 30 inches in height, direct applications beneath the crop canopy using drop nozzles and appropriate nozzle spacing for best performance.
- **Preharvest Interval (PHI): DO NOT** make applications to field corn or popcorn within 45 days of corn harvest (silage, fodder, or grain) or after the V8 stage of corn growth, whichever comes first.
- **Sweet Corn** - Applications can be made from preemergence to 12-inches tall.
- **Preharvest Interval (PHI): DO NOT** apply within 50 days of harvesting sweet corn ears.

Corn Tank Mixes

Armezon PRO may be tank mixed or applied sequentially to broaden the spectrum or increase the length of residual weed control. Refer to tank mix product labels to confirm the respective tank mix products are registered for use on specific corn types and follow the label restrictions for the most restrictive tank mix product. Not all corn products are registered on popcorn, seed corn, and sweet corn.

Photosystem II inhibitors (**Group 5** herbicides) including atrazine are known to enhance the activity of HPPD-inhibitor (**Group 27** herbicides) containing herbicides like **Armezon PRO**. Thus, additional corn necrosis can frequently be observed when tank mixing **Armezon PRO** with atrazine.

Use of additional tank mix herbicides and/or oil-type adjuvants may increase the potential for necrosis. These symptoms are transient and occur infrequently; crop growth is typically not affected.

Sequential Herbicide Combinations and Uses

Armezon PRO at rates shown in **Table 2** may be applied as the postemergence component of a planned two-pass sequential program. If using other dimethenamid-P containing products in a sequential program, **DO NOT** apply more than 1.125 pounds per acre of dimethenamid-P (24 fl ozs/A equivalent of **Outlook® herbicide**).

Armezon PRO may be applied in sequence with products containing isoxaflutole (e.g. **Balance® Flexx herbicide**) if the isoxaflutole rate used is less than or equal to 0.0625 pound active ingredient per acre (equal to 4 fl ozs/A of **Balance Flexx**).

Corn Restrictions

- **DO NOT** use **Armezon PRO** in California on sweet corn unless otherwise directed by supplemental labeling.
- **Armezon PRO** is not for sale, distribution, or use in Nassau and Suffolk counties of New York State.

- **DO NOT** use sprayable fluid fertilizer as the carrier for applications of **Armezon® PRO herbicide** made after crop emergence.
- **DO NOT** apply more than 24 fl ozs/A of **Armezon PRO** (0.017 pound topramezone per acre; 0.84 pound dimethenamid-P per acre) in a single application.
- **DO NOT** apply more than 28 fl ozs/A of **Armezon PRO** (0.022 pound topramezone per acre; 1.125 pounds dimethenamid-P per acre) in a single growing season.
- **DO NOT** apply more than a maximum cumulative amount of 0.022 pound topramezone per acre and 1.125 pounds dimethenamid-P per acre from all product sources per cropping season.
- **Preharvest Interval (PHI): DO NOT** apply **Armezon PRO** within 45 days of field corn or popcorn harvest (silage, fodder, or grain) or after the V8 stage of corn growth, whichever comes first.
- **Preharvest Interval (PHI): DO NOT** apply **Armezon PRO** within 50 days of harvesting sweet corn ears, or after corn is 12-inches tall, whichever comes first.
- **DO NOT** graze or feed treated corn forage, silage, fodder, or grain for at least 45 days after an application of **Armezon PRO**.

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.

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