7969-192 02/23/2004 1/29

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

FEB 23 2004

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Dr. Craig D. Kleppe
BASF Corporation
Agricultural Products
26 Davis Dr., P.O. Box 13528
Research Triangle Park, NC 27709-3528

Dear Dr. Kleppe:

Subject. Guardsman Max Herbicide, G-Max Herbicide
EPA Registration Number 7969-192
Application Dated February 5, 2004

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records. Submit one (1) copy of final printed labeling before you release the product for shipment.

If you have any questions, contact Hope Johnson at 703-305-5410.

Sincerely,

James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

2/29

RESTRICTED USE PESTICIDE
DUE TO GROUND AND SURFACE WATER CONCERNS

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

This product is a restricted use herbicide due to ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.

BASF

Guardsman Max®
herbicide

ACCEPTED
with COMMENTS
in EPA Letter Dated

FEB 23 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

7969-192

For use in corn (field, pop, seed, and sweet) and sorghum (grain)

Active Ingredients:

Dimethenamid-P* (S)-(2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide)	18.2%
Atrazine* (2-chloro-4-ethylamino-6-isopropyl-amino-s-triazine)	35.3%
Inert Ingredients:**	46.5%
Total	100.0%

* contains 1.7 pounds of dimethenamid-P and 3.3 pounds of (atrazine) per gallon
** contains petroleum distillates

EPA Reg. Number: 7969-192 **EPA Est. Number:**

KEEP OUT OF REACH OF CHILDREN.

CAUTION

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 labeling for complete **Precautionary Statements, First Aid, Directions For Use,** and **Conditions of Sale and Warranty.**

Product of U.S.A.

Net contents:

Shake before using.

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

3/29

FIRST AID	
If swallowed	•Call a poison control center or doctor immediately for treatment advice. •Have person sip a glass of water if able to swallow. •Do not induce vomiting unless told to do so by a poison control center or doctor. •Do not give anything by mouth to an unconscious person.
If in eyes	•Hold eye open and rinse slowly and gently with water for 15-20 minutes. •Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. •Call a poison control center or doctor for treatment advice.
If on skin or clothing	•Take off contaminated clothing. •Rinse skin immediately with plenty of water for 15-20 minutes. •Call a poison control center or doctor for treatment advice.
If 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.
HOT LINE 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 Corporation for emergency medical treatment information: 1-800-832-HELP (4357)	
Note to Physician: Contains Petroleum Distilate - vomiting may cause aspiration pneumonia	

Precautionary Statements

Hazards to Humans and Domestic Animals
CAUTION. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Personal Protective Equipment (PPE)
Some materials that are chemical resistant to this product are listed below. For more options, refer to category **C** on an EPA chemical resistance category selection chart. See Engineering Controls for additional requirements.

Mixers, loaders, applicators and other handlers not using Engineering Controls must wear:
- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear (if overhead exposure)
- A NIOSH approved dust-mist filtering respirator with a TC84 cartridge
- Chemical-resistant apron (if exposed to undiluted product)
- Protective eyewear

Mixers, loaders, applicators and other handlers using Engineering Controls must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves and apron (mixers and loaders only)
- Shoes plus socks

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

Engineering Controls Statements

Mixers and loaders supporting aerial applications at a rate greater than 3 lbs ai/A must use a closed system that meets the requirements for dermal and inhalation protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] and must:
- wear the personal protective equipment required above for handlers using engineering controls,
- wear protective eyewear if the system operates under pressure, and
- 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.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d) (4)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240 (d) (5)] for dermal protection. In addition, such applicators and flaggers must:
- wear the personal protective equipment required above for handlers using engineering controls,
- either wear the type of respirator specified in the PPE above or use an enclosed cab that provides inhalation protection equivlent to a dust mist respirator,
- be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical resistant gloves, chemical resistant footwear, chemical resistant headgear if overhead exposure and a dust mist respirator if using an enclosed cab that provides inhalation protection,
- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical resistant container, such as a plastic bag, to prevent contamination to the inside of the cab.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove 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 discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Ground and Surface Water Advisory

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. Following application and during rainfall events that cause run-off, this chemical may reach surface water bodies including streams, rivers, and reservoirs.

Guardsman Max contains the active ingredient atrazine. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy soils where the water table (gound water) is close the surface and where these soils are very permeable; i.e., well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

- This product must not be mixed, loaded, or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sinkholes.
- Operations that involve mixing, loading, rinsing, or washing of this product, or other pesticide handling or application equipment or containers within 50 ft. of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the equipment and that may be positioned under and around the pad. Such a pad shall be designed and maintained to contain any product spills, equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be sufficient capacity to contain a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment 100% of the capacity of the largest pesticide container or application equipment on the pad.
- Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide to the mixing/loading sites.
- Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.
- Product must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes, and reservoirs.
- Product must not be applied within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs.
- If this product is applied to highly erodible land and the 66-foot buffer or set-back from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Care must be taken when using this product to prevent 1) back-siphoning into wells, 2) spills, or 3) improper disposal of excess pesticide, spray mixes, or rinsates.
Check valves or anti-siphoning devices must be used on all mixing equipment to prevent back-siphoning into wells or bulk storage tanks. Refer to **Storage and Disposal** regarding proper disposal of excess pesticide, spray mixes, and rinsates.

Tile-Outletted Fields Containing Standpipes
One of the following restrictions must be used in applying atrazine to tile-outletted fields containing Sandpipes:

- Do not apply within 66 feet of standpipes in tile-outletted terraced fields.
- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
- Apply this product to the entire tile-outletted field under a no-till practice only when high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conndition favor drift from treated areas.
Runoff and drift from treated areas may be hazardous to aquatic organisums in neighboring areas. Do not contaminate water when disposing of equipment wash water.

Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

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 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
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, PVC, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear

Storage and Disposal

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

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, and foodstuffs. 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.

Pesticide Disposal: Wastes resulting from this product may be disposed of on site or at an approved 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 Disposal:

- **Plastic or Metal Containers:** Triple rinse (or equivalent) and add rinsate to spray tank. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
- **Bulk/Mini-bulk Containers:** This container must only be refilled with a pesticide product. **Do Not Reuse the Container for Any Other Purpose.** Cleaning is not necessary prior to refilling with the same product. **However, if the container is refilled with another pesticide product, the container must be cleaned according to written instructions provided by BASF prior to refilling.** Do not transport if the container is damaged or leaking. To obtain information about recycling refillable containers or if a container that is dedicated to BASF is damaged or leaking, contact BASF Corporation at 1-800-551-CROP® Cleaning and final disposal of this container **must** be in compliance with state and local regulations.

In Case of Spill

In case of large-scale spillage regarding this product, call:

CHEMTREC	800-424-9300
BASF Corporation	800-832-HELP

Steps to be taken in case 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 re-use. Keep the spill out of all sewers and open bodies of water.

I. General Information

Guardsman Max is a selective pre-emergence herbicide for controlling most annual grasses, many annual broadleaf weeds, and sedges in field corn, seed corn, sweet corn, popcorn and grain sorghum (refer to **Table 1. Weeds Controlled**)

Table 1. Weeds Controlled

Some weed species may have triazine-resistant biotypes that will not be controlled adequately by this product. If resistant biotypes are suspected, use an alternate program or use non-triazine products such as **Clarity® or Prowl®** herbicide in combination or sequentially with **Guardsman Max.**

Annual Grasses	Annual Broadleaves
Barnyardgrass	Amaranth, Palmer
Crabgrass, large	Amaranth, Powell
, smooth	Buckwheat, wild
Cupgrass, southwestern	Chamomile, mayweed
, woolly*	Carpetweed
Foxtail, giant	Cocklebur*
, green	Eclipta
, yellow	Jimsonweed
Goosegrass	Kochia
Johnsongrass (seedling)*	Lambsquarters, common
Millet, wild proso*	Morningglory, annual
Oats, wild	Mustards
Panicum, fall	Nightshade*, black
, Texas*	, eastern black
Red Rice	, hairy
Sandbur*	Pigweed, prostrate
Shattercane*	, redroot
Signalgrass, broadleaf*	, smooth
Witchgrass	, tumble
Sedge	Purslane, common
Flatsedge, rice	Pusley, Florida
Nutsedge, yellow*	Ragweed, common
	, giant*
	Smartweed
	Spurge, nodding
	, spotted
	Velvetleaf*
	Waterhemp, Common
	, Tall

* partial control or suppression. To complement control, **Guardsman Max** should be used in tank mixes or sequential applications with other herbicides that provide additional control of these weed species.

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

Mode of Action

Guardsman Max contains two active ingredients: dimethenamid-P, as an inhibitor of cell division, Group 15, and atrazine, an inhibitor of photosynthesis at photo system II Site A, Group 5. **Guardsman Max** typically controls weeds before or soon after they emerge from the soil.

Herbicide Resistance

Naturally occurring biotypes of certain pests with resistance to the atrazine component in **Guardsman Max** are known to exist. Selection of resistant biotypes, through repeated use of atrazine or related triazine herbicides (same mode of action), may result in loss of field efficacy or control failures. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or related products should be avoided. Consult your local extension specialist or agricultural advisor for assistance in managing resistant weed biotypes.

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.

II. Application Instructions

Guardsman Max may be applied preplant surface, preplant incorporated, pre-emergence or may be applied early postemergence to corn or sorghum. **Guardsman Max** will provide most effective weed control when applied (by ground or aerial equipment), and subsequently incorporated into soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed seedling emergence from soil. **Guardsman Max** may be applied using either water or fluid fertilizer as the spray carrier, or impregnated onto and applied with dry bulk fertilizer. Sprayable fluid fertilizer as a carrier is not recommended for use after crop emergence unless the typical fertilizer burn symptoms on the crop are acceptable. Refer to section **III. Additives** for more information.

Application Rate

Recommended use rates for **Guardsman Max** when used alone, in tank mix, or sequential applications are given in **Table 2** (refer to section **IV. General Tank Mixing Information** and section **VI. Crop-Specific Information** for more details). Use rates of this product vary by soil texture and organic matter. Soil texture groupings 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).
When use rates are expressed in ranges, use the lower rates for more coarsely textured soils lower in organic matter and use the higher rates for more finely textured soils that are higher in organic matter. Reduced rates may be used where partial control or reduced length of soil residual control is required (refer to **Table 2**).

Table 2. Guardsman Max Application Rates per Acre[1,2]

As Determined By Soil Texture and Organic Matter Content		
Soil Texture	**Organic Matter Content**	
	Less than 3%	**3% or more[3]**
Coarse	2.5-3.0 pints	3.0-4.0 pints
Medium or Fine	3.0-4.0 pints	4.0-4.6 pints

[1] The rates listed are intended for full season control of targeted weeds. Reduced rates (1.5-3.0 pints of **Guardsman Max** per acre) may be used where partial control or reduced length of soil residual control is required, such as postemergence applications, or pre-emergence applications where cultivation or sequentially applied herbicides will be used for added control of the same targeted weed species. Use 1.5-2.0, 2.0-2.5, and 2.5-3.0 pints of **Guardsman Max** per acre on coarse, medium, and fine soil respectively.
[2] For all early preplant applications, use 3.8-4.6 pints of **Guardsman Max** per acre. Do not exceed 3.8 pints per acre on highly erodible soils with less than 30% plant residue cover prior to crop emergence.
[3] On all soils with 8-20% organic matter, use 3.8-4.6 pints of **Guardsman Max** per acre. **Guardsman Max** is not recommended for use on soils with more than 20% organic matter.

Application Timing

Preplant Surface Applications: For use in minimum tillage or no-tillage production systems, apply **Guardsman Max** alone or in tank mixes up to 45 days before planting. When making early preplant applications (15-45 days prior to planting), use the highest rate recommended for the specific soil texture. Early preplant applications are not recommended for use on coarse-textured soils or in areas where average annual rainfall (or rainfall + irrigation) typically exceeds 40". 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 **Guardsman Max** rate early followed by 1/3 of rate after planting). A split application is recommended when the initial application is made more than 30 days prior to planting. Tank mixes with postemergence herbicides such as **Clarity***, **Gramoxone* Extra**, **Roundup Ultra***, or **Touchdown*** must be used when weeds are more than 1.5" tall at the time of application.
Preplant Incorporated Applications: Apply **Guardsman Max** and incorporate into the upper (1-2") 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 may result.
Pre-emergence Surface Applications: 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 Applications: **Guardsman Max** may be applied early postemergence to corn or sorghum up to 12" tall. Apply **Guardsman Max** before weeds are greater than 1.5" tall or in a tank mix with products that control emerged weeds.
Split Applications: **Guardsman Max** 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 **Guardsman Max** rate used must not exceed the maximum rate given for each specific soil type. If applications are 2 weeks or more apart, a total **Guardsman Max** use rate of up to 4.6 pints per acre per year may be used on any soil type.

Managing Off-target Movement

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

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

INFORMATION ON DROPLET SIZE
The best drift management strategy and most effective way to reduce drift potential are 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 INVERSIONS).

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

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.

SWATH ADJUSTMENT
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment [illegible] 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 [illegible] mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

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

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 Methods 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 applications
Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor, 2) nozzle orientation - nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should 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 **Guardsman Max** by banding, determine the amount of herbicide and water volume 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 Methods and Equipment (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. Adequate spray volume must be used to provide accurate and uniform distribution of spray particles over the treated area and to avoid drift of spray particles to nontarget areas.

Application Equipment: Use nozzle screens no finer than 50 mesh.

Ground Application (Dry Bulk Fertilizer)

Guardsman Max may be impregnated or coated onto dry bulk granular fertilizer carriers for preplant surface, preplant incorporated, or pre-emergence applications. Impregnation or coating may be conducted by either the in-plant bulk system or the on-board system. **Guardsman Max** 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 **Guardsman Max** in these application systems are responsible for following all state and local regulations regarding fertilizer and herbicide blending. The addition of a drying agent may be necessary if the fertilizer and herbicide blend is too wet for uniform application due to 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 recommended for use with on-board impregnation systems. Under some conditions, fertilizer impregnated with **Guardsman Max** may clog air tubes or deflector plates on pneumatic application systems. Mineral oil may be added to **Guardsman Max** before blending with fertilizer to reduce plugging. Do not use drying agents when mineral oil is used. To avoid separation of **Guardsman Max** and mineral oil mixes in cold temperatures, either keep mixture heated or agitated prior to blending with fertilizer. Mineral oil may be used at in-plant blending stations or on-board injection systems.

Apply 200-750 pounds of fertilizer and herbicide blend per acre. Application must be made uniformly to the soil to prevent possible crop injury and offer satisfactory weed control. Impregnated fertilizer spread at half 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 (1-2") incorporation is desirable for improved weed control. Deeper incorporation may result in unsatisfactory weed control.

Formula to determine the herbicide rate when using dry bulk fertilizer applications:

$$\frac{\text{Pints or pounds of herbicide per acre}}{\text{pounds of fertilizer per acre}} \times 2{,}000 = \text{Pints or pounds of herbicide per ton of fertilizer}$$

Incompatible Mixtures

Do not impregnate **Guardsman Max** or **Guardsman Max** 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 **Guardsman Max** alone.

III. Additives

Spray adjuvants have little or no influence on performance of **Guardsman Max** when applications are made prior to weed emergence. To improve burndown of emerged weeds, surfactants or low-rate fertilizer (28%, 30%, or 32% UAN or ammonium sulfate), or crop oil concentrate may be used with **Guardsman Max** alone or in tank mixes applied preplant, pre-emergence, or early postemergence to the crop. Consult your local BASF representative for recommendations for your area.

Nitrogen Source

- **Urea ammonium nitrate (UAN):** Use 1-2 gallons of UAN (commonly referred to as 28%, 30%, or 32% nitrogen solution) per 100 gallons spray solution. Do not use brass or aluminum nozzles when spraying UAN.
- **Ammonium sulfate (AMS):** AMS at 8-17 pounds per 100 gallons spray solution may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. 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

The standard label recommendation is 1-2 quarts of an 80% active nonionic spray surfactant per 100 gallons of spray solution.

Oil Concentrate

Crop oil concentrates are labeled for [illegible] emergence only when **Guardsman Max** is used alone or in tank mixes with atrazine. See the manufacturer's label for specific rate recommendations. A crop oil concentrate must contain either a petroleum or vegetable [illegible] must meet all of the following criteria:

- be nonphytotoxic.
- contain only EPA-exempt ingredients.
- provide good mixing quality in the jar test [illegible]
- be successful in local experience.

The exact composition of suitable [illegible] however, vegetable and petroleum [illegible] should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have been satisfactory than unrefined vegetable oils. For additional information, see **Compatibility Test for Mix Components**.

Table 3. Additive Rate

Additive	Rate
Nonionic Surfactant	[illegible] per 100 gallons
AMS	[illegible] pounds per 100 gallons
UAN Solution	1-2 gallons per 100 gallons
Crop Oil Concentrate*	1 quart per acre*

*See manufacturer's label for specific rate recommendations.

11/29

IV. General Tank Mixing Information

Guardsman Max may be tank mixed with one or more herbicide products according to the crop specific tank mixing instructions in this label and respective product labels. Refer to section **VI. Crop-Specific Information** to determine which tank mix products can be applied to specific crops.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Guardsman Max** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers BASF does not recommend using tank mixes other than those listed on BASF labeling. Local agricultural authorities may be a source of information when using other than BASF recommended tank mixes.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

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.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended 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, nor fine particles that precipitate to the bottom, nor 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

1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2) **Agitation.** Maintain constant agitation throughout mixing and application.
3) **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
4) **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.
5) **Water-dispersible products** (such as **Guardsman Max**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
6) **Water-soluble products.**
7) **Emulsifiable concentrates** (oil concentrate when applicable).
8) **Water-soluble additives** (such as AMS or UAN when applicable).
9) **Remaining quantity of water.**

Maintain constant agitation during application.

V. Restrictions and Limitations

- **Restricted Use Pesticide:** This product is a restricted use herbicide due to ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.
- **Maximum seasonal use rate:** Do not apply more than a **total of 4.6 pints** of **Guardsman Max** per acre, per season. **Guardsman Max** contains 3.3 pounds of the active ingredient atrazine per gallon (0.41 pounds of a.i. per pint). When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, the total pounds of atrazine applied (lbs ai/A) must not exceed the specific seasonal rate limits from preemergence, or postemergence, or premergence + postemergence sequential applications, as noted below:

— **Prior to crop emergence:** Do not exceed 1.6 pounds of atrazine a.i. per acre on highly erodible soils with less than 30% plant residue cover. Do not exceed 2.0 pounds of atrazine a.i. per acre on other soils.

— **After crop emergence:** Do not exceed 2.0 pounds of atrazine a.i. per acre on any soil.

— **Prior to and after crop emergence (sequential applications):** Do not exceed 2.5 pounds of atrazine a.i. per acre on any soil.

- **Preharvest Interval (PHI):** Refer to section **VI. Crop-Specific Information** for crop-specific preharvest intervals and feeding and grazing restrictions.
- **Restricted Entry Interval (REI): 12 hours**
- **Guardsman Max** is not for sale, distribution, or use in Nassau or Suffolk counties in New York state.
- **Crop Rotation Restriction:**

— If the crop treated with **Guardsman Max** is lost to adverse weather or for other reasons, the area treated may be replanted to corn and grain sorghum immediately. If the original **Guardsman Max** treatment was broadcast, do not make a second application of **Guardsman Max** if the combined rate exceeds the maximum rate per season. If the original application was banded and the second crop is planted in the row middles, a second band application may be applied.

— Corn, sorghum, soybeans, cotton or peanuts may be planted the year following treatment. Injury may occur to soybeans planted on soils having a calcareous surface layer.

— Do not plant sugarbeets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small seeded legumes and grasses the year following application, or injury may occur.

— **Stress:** Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as injury may result.

- Do not apply through any type of **irrigation** equipment. Do not contaminate irrigation ditches or water used for domestic purposes.

VI. Crop-Specific Information

Corn (Field, Pop, Seed, and Sweet)

Guardsman Max may be applied preplant surface, preplant incorporated, pre-emergence, or postemergence to corn up to 12" tall. Corn in this label refers to field corn (grown for grain, silage, or seed), sweet corn (not including sweet corn grown for seed), and popcorn. Before applying **Guardsman Max** to seed corn, sweet corn, or popcorn, verify with your local seed company (supplier) the **Guardsman Max** selectivity on your inbred line or hybrid to help avoid potential injury to sensitive hybrids.

Refer to section **II. Application Instructions** to determine **Guardsman Max** use rates by soil type and use pattern.

Crop-Specific Restrictions and Limitations

Field corn forage may be grazed or fed to livestock 60-days or more after application of **Guardsman Max**. Sweet corn forage may be grazed or fed to livestock 45-days or more after application of **Guardsman Max**.

Corn Tank Mixes

Guardsman Max may be tank mixed or applied sequentially in corn with one or more of the following 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 use on the specific corn types, as not all corn products are registered for use on seed, pop and sweetcorn. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- **Accent®**
- **Accent Gold®**
- **Atrazine**
- **Balance® Pro**[1]
- **Banvel®**
- **Basagran®**
- **Basis Gold®**
- **Beacon®**
- **Callisto®**
- **Clarity®**
- **Eradicane®**
- **Gramoxone® Extra**
- **Hornet™**
- **Laddok® S-12**
- **Liberty®**[2]
- **Lightning®**[3]
- **Marksman®**
- **Option®**
- **Outlook®**[4]
- **Princep®**
- **Prowl®**
- **Pursuit®**[3]
- **Ready Master® ATZ**[5]
- **Python®**
- **Roundup Ultra®**[5]
- **Steadfast™**
- **Touchdown®**
- **2,4-D**[6]

[1] To improve weed control of some species, including velvetleaf, tank mix 1.5 - 2.25 fluid ounces of **Balance® Pro** per acre with the recommended rate of **Guardsman Max®**.

[2] Use only in **Liberty Link®** (glufosinate-tolerant) corn hybrids.

[3] Use only in **Clearfield®** (imidazolinone-tolerant) corn hybrids.

[4] Do not exceed a total of 0.98 pounds a.i. of dimethenamid-P per crop season.

[5] Includes postemergence tank mixes on **Roundup Ready®** (glyphosate tolerant) corn hybrids.

[6] For preplant or preemergence use only. 2,4-D is not recommended for use within 7 days prior to or 5 days after planting. For preemergence applications, make sure seed furrows are closed and corn seed is covered by a minimum of 1.5" of soil to reduce the chance of injury.

Sorghum (grain)

Guardsman Max may be applied preplant, preplant incorporated, preemergence or postemergence to grain sorghum up to 12" tall.

All **Guardsman Max** 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.

Refer to section **II. Application Instructions** to determine **Guardsman Max** use rates by soil type and use pattern. Do not use **Guardsman Max** on sorghum planted in coarse-textured soil.

For best performance make preemergence surface applications within 5 days of the last preplant tillage if grasses have emerged. **Guardsman Max** must be applied before they reach the 2-leaf stage or must be used in combination with an effective postemergence herbicide.

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

Guardsman Max is not registered for use on sweet or forage sorghum.

Sorghum forage may be grazed or fed to livestock 60 days or more after premergence application of **Guardsman Max**. Sorghum forage may be grazed or fed to livestock 45 days or more after postemergence application of **Guardsman Max**. Grain and fodder may be harvested and fed 80 days or more after application of **Guardsman Max**.

Sorghum Tank Mixes

Guardsman Max may be tank mixed or applied sequentially in sorghum with one or more of the following herbicide products according to the specific tank mixing instructions in this label and respective product labels. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- **Atrazine**
- **Basagran®**
- **Clarity®**
- **Cyclone®**
- **Fallow Master®**
- **Gramoxone® Extra**
- **Laddok® S-12**
- **Landmaster®**
- **Paramount®**
- **Peak®**
- **Permit®**
- **Roundup Ultra®**
- **Roundup Ultra® RT**

[illegible] applications preplant only.

[illegible] tank mixes listed, **Guardsman Max** [illegible] used in sequential applications with [illegible] herbicides labeled for use in grain sorghum such as **Buctril®**, **Marksman®**, **Weedmaster®** or 2,4-D.

Pests listed in this label:	
Common Name	**Scientific Name**
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, Powell	*Amaranthus powellii*
Barnyardgrass	*Echinochloa crus galli*
Buckwheat, Wild	*Polygonum convolvulus*
Chamomile, mayweed	*Anthemis cotula*
Carpetweed	*Mollugo verticillata*
Cocklebur, Common	*Xanthium strumarium*
Crabgrass, Large	*Digitaria sanguinalis*
, Smooth	*Digitaria ischaemum*
Cupgrass, Southwestern	*Eriochloa gracilis*
, Woolly	*Eriochloa villosa*
Eclipta	*Eclipta alba*
Flatsedge, Rice	*Cyperus iria*
Foxtail, Giant	*Setaria faberi*
, Green	*Setaria viridis*
, Yellow	*Setaria lutescens*
Goosegrass	*Eleusine indica*
Jimsonweed	*Datura stramonium*
Johnsongrass (seedling)	*Sorghum halepense*
Kochia	*Kochia scoparia*
Lambsquarters, Common	*Chenopodium album*
Millet, Wild Proso	*Panicum miliaceum*
Morningglory, Annual	*Ipomoea hederacea*
Mustard species	*Sinapis arvensis*
Nightshade, Black	*Solanum nigrum*
, Eastern Black	*Solanum ptycanthum*
, Hairy	*Solanum sarrachoides*
Nutsedge, Yellow	*Cyperus esculentus*
Oats, Wild	*Avena fatua*
Panicum, Fall	*Panicum dichotomiflorum*
, Texas	*Panicum texanum*
Pigweed, Prostrate	*Amaranthus blitoides*
, Redroot	*Amaranthus retroflexus*
, Smooth	*Amaranthus hybridus*
, Tumble	*Amaranthus albus*
Pusley, Florida	*Richardia scabra*
Purslane, Common	*Portulaca oleracea*
Red Rice	*Oryza sativa*
Ragweed, Common	*Ambrosia artemisiifolia*
, Giant	*Ambrosia trifida*
Sandbur	*Cenchrus spp*
Shattercane	*Sorghum bicolor*
Signalgrass, Broadleaf	*Brachiaria platphylla*
Smartweed species	*Polygonum spp*
Spurge, Nodding	*Euphorbia nutans*
, Spotted	*Euphorbia maculata*
Velvetleaf	*Abutilon theophrasti*
Waterhemp, Common	*Amaranthus rudis*
, Tall	*Amaranthus tuberculatus*
Witchgrass	*Panicum capillare*

Crops

This product can be used on the following crops:

Corn (Field, Pop, Seed, and Sweet)
Sorghum, Grain

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 CORPORATION ("BASF") or the Seller. 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. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, 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.

Basagran, Banvel, Clarity, Clearfield, Laddok, Lightning, Marksman, Guardsman, Guardsman Max, Outlook, Paramount, Prowl, Pursuit and Weedmaster are registered trademarks of BASF.
Accent, Basis Gold and Steadfast are registered trademarks and Accent Gold is a trademark of E. I. du Pont de Nemours & Company.
Balance Pro, Buctril, Liberty, Liberty Link and Option are registered trademarks of Bayer Crop Science.
FallowMaster, Landmaster, Ready Master, Roundup Ready, Roundup Ultra is a registered trademark of Monsanto Company.
Hornet is a trademark of Dow Agro Science.
Beacon, Callisto, Cyclone, Fradicane, Gramoxone, Peak, Princep and Touchdown are registered trademarks of Syngenta Crop Protection.
Permit is a registered trademark of Nissan Chemical Industries, Ltd.

007969 00292 20040204 0233.pdf
NVA 2003-04-100-0231
Supersedes: NVA 2002-04-100-0135

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

Agricultural Products

BASF

16/29

RESTRICTED USE PESTICIDE
DUE TO GROUND AND SURFACE WATER CONCERNS

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

This product is a restricted use herbicide due to ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.

BASF

G-Max®
herbicide

ACCEPTED
with COMMENTS
in EPA Letter Dated

FEB 23 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

7969-192

For use in corn (field, pop, seed, and sweet) and sorghum (grain)

Active Ingredients:

Dimethenamid-P* (S)-(2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide)	18.2%
Atrazine* (2-chloro-4-ethylamino-6-isopropyl-amino-s-triazine)	35.3%
Inert Ingredients:**	46.5%
Total	100.0%

* contains 1.7 pounds of dimethenamid-P and 3.3 pounds of (atrazine) per gallon
** contains petroleum distillates

EPA Reg. Number: 7969-192 **EPA Est. Number:**

KEEP OUT OF REACH OF CHILDREN.

CAUTION

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 labeling for complete **Precautionary Statements, First Aid, Directions For Use,** and **Conditions of Sale and Warranty.**

Product of U.S.A.

Net contents:

Shake before using.

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

17/29

FIRST AID	
If swallowed	•Call a poison control center or doctor immediately for treatment advice. •Have person sip a glass of water if able to swallow. •Do not induce vomiting unless told to do so by a poison control center or doctor. •Do not give anything by mouth to an unconscious person.
If in eyes	•Hold eye open and rinse slowly and gently with water for 15-20 minutes. •Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. •Call a poison control center or doctor for treatment advice.
If on skin or clothing	•Take off contaminated clothing. •Rinse skin immediately with plenty of water for 15-20 minutes. •Call a poison control center or doctor for treatment advice.
If 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.
HOT LINE 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 Corporation for emergency medical treatment information: 1-800-832-HELP (4357).	
Note to Physician: Contains Petroleum Distilate - vomiting may cause aspiration pneumonia	

Precautionary Statements

Hazards to Humans and Domestic Animals
CAUTION. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Personal Protective Equipment (PPE)
Some materials that are chemical resistant to this product are listed below. For more options, refer to category **C** on an EPA chemical resistance category selection chart. See Engineering Controls for additional requirements.

Mixers, loaders, applicators and other handlers not using Engineering Controls must wear:
- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear (if overhead exposure)
- A NIOSH approved dust-mist filtering respirator with a TC84 cartridge
- Chemical-resistant apron (if exposed to undiluted product)
- Protective eyewear

Mixers, loaders, applicators and other handlers using Engineering Controls must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves and apron, (mixers and loaders only)
- Shoes plus socks

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

Engineering Controls Statements

Mixers and loaders supporting aerial applications at a rate greater than 3 lbs ai/A must use a closed system that meets the requirements for dermal and inhalation protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] and must:
- wear the personal protective equipment required above for handlers using engineering controls,
- wear protective eyewear if the system operates under pressure, and
- 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.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d) (4)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240 (d) (5)] for dermal protection. In addition, such applicators and flaggers must:
- wear the personal protective equipment required above for handlers using engineering controls,
- either wear the type of respirator specified in the PPE above or use an enclosed cab that provides inhalation protection equivlent to a dust mist respirator.
- be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical resistant gloves, chemical resistant footwear, chemical resistant headgear if overhead exposure and a dust mist respirator if using an enclosed cab that provides inhalation protection
- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical resistant container, such as a plastic bag, to prevent contamination fo the inside of the cab.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove 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 discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Ground and Surface Water Advisory

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. Following application and during rainfall events that cause run-off, this chemical may reach surface water bodies including streams, rivers, and reservoirs.

G-Max contains the active ingredient atrazine. atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy soils where the water table (gound water) is close the surface and where these soils are very permeable: i.e., well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

- This product must not be mixed, loaded, or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers, within 50 ft. of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be sufficient capacity to contain a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment 100% of the capacity of the largest pesticide container or application equipmment on the pad.
- Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide to the mixing/loading sites.
- Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.
- Product must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes, and reservoirs.
- Product must not be applied within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs.
- If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Care must be taken when using this product to prevent 1) back siphoning into wells, 2) spills, or 3) improper disposal of excess pesticide, spray mixes, or rinsates.
Check valves or anti-siphoning devices must be used on all mixing equipment to prevent back-siphoning into wells or bulk storage tanks. Refer to **Storage and Disposal** regarding proper disposal of excess pesticide, spray mixes, and rinsates.

Tile-Outletted Fields Containing Standpipes
One of the following restrictions must be used in applying atrazine to tile-outletted fields containing Sandpipes:

- Do not apply within 66 feet of standpipes in tile-outletted terraced fields:
- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
- Apply this product to the entire tile-outletted field under a no-till practice only when high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conndition favor drift from treated areas.
Runoff and drift from treated areas may be hazardous to aquatic organisums in neighboring areas. Do not contaminate water when disposing of equipment wash water.

Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

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 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
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, PVC, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear

20/29

Storage and Disposal

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

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, and foodstuffs. 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.

Pesticide Disposal: Wastes resulting from this product may be disposed of on site or at an approved 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 Disposal:

- **Plastic or Metal Containers:** Triple rinse (or equivalent) and add rinsate to spray tank. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
- **Bulk/Mini-bulk Containers:** This container must only be refilled with a pesticide product. **Do Not Reuse the Container for Any Other Purpose.** Cleaning is not necessary prior to refilling with the same product. **However, if the container is refilled with another pesticide product, the container must be cleaned according to written instructions provided by BASF prior to refilling.** Do not transport if the container is damaged or leaking. To obtain information about recycling refillable containers or if a container that is dedicated to BASF is damaged or leaking, contact BASF Corporation at 1-800-551-CROP. Cleaning and final disposal of this container **must** be in compliance with state and local regulations.

In Case of Spill

In case of large-scale spillage regarding this product, call:

CHEMTREC	800-424-9300
BASF Corporation	800-832-HELP

Steps to be taken in case 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 re-use. Keep the spill out of all sewers and open bodies of water.

I. General Information

G-Max is a selective pre-emergence herbicide for controlling most annual grasses, many annual broadleaf weeds, and sedges in field corn, sweet corn, popcorn and grain sorghum (refer to **Table 1. Weeds Controlled**).

Table 1. Weeds Controlled

Some weed species may have triazine-resistant bio types that will not be controlled adequately by this product. If resistant biotypes are suspected, use an alternate program or use non-triazine products such as **Clarity*** **or Prowl*** herbicide in combination or sequentially with **G-Max.**

Annual Grasses	Annual Broadleaves
Barnyardgrass	Amaranth, Palmer
Crabgrass, large	Amaranth, Powell
, smooth	Buckwheat, wild
Cupgrass, southwestern	Chamomile, mayweed
, woolly	Carpetweed
Foxtail, giant	Cocklebur
, green	Eclipta
, yellow	Jimsonweed
Goosegrass	Kochia
Johnsongrass (seedling)	Lambsquarters, common
Millet, wild proso	Morningglory, annual
Oats, wild	Mustards
Panicum, fall	Nightshade, black
, Texas	, eastern black
Red Rice	, hairy
Sandbur	Pigweed, prostrate
Shattercane	, redroot
Signalgrass, broadleaf	, smooth
Witchgrass	, tumble
Sedge	Purslane, common
Flatsedge, rice	Pusley, Florida
Nutsedge, yellow	Ragweed, common
	, giant
	Smartweed
	Spurge, nodding
	, spotted
	Velvetleaf
	Waterhemp, Common
	, Tall

partial control or suppression. To complement control, **G-Max** should be used in tank mixes or sequential applications with other herbicides that provide additional control of these weed species.

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

Mode of Action

G-Max contains two active ingredients: dimethenamid-P, as an inhibitor of cell division, Group 15, and atrazine, an inhibitor of photosynthesis at photo system II Site A, Group 5. **G-Max** typically controls weeds before or soon after they emerge from the soil.

Herbicide Resistance

Naturally occurring biotypes of certain pests with resistance to the atrazine component in **G-Max** are known to exist. Selection of resistant biotypes, through repeated use of atrazine or related triazine herbicides (same mode of action), may result in loss of field efficacy or control failures. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or related products should be avoided. Consult your local extension specialist or agricultural advisor for assistance in managing

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.

II. Application Instructions

G-Max may be applied preplant surface, preplant incorporated, pre-emergence or may be applied early postemergence to corn or sorghum. **G-Max** will provide most effective weed control when applied (by ground or aerial equipment), and subsequently incorporated into soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed seedling emergence from soil. **G-Max** may be applied using either water or fluid fertilizer as the spray carrier, or impregnated onto and applied with dry bulk fertilizer. Sprayable fluid fertilizer as a carrier is not recommended for use after crop emergence unless the typical fertilizer burn symptoms on the crop are acceptable. Refer to section **III. Additives** for more information.

Application Rate

Recommended use rates for **G-Max** when used alone, in tank mix, or sequential applications are given in **Table 2** (refer to section **IV. General Tank Mixing Information** and section **VI. Crop-Specific Information** for more details). Use rates of this product vary by soil texture and organic matter. Soil texture groupings 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).
When use rates are expressed in ranges, use the lower rates for more coarsely textured soils lower in organic matter and use the higher rates for more finely textured soils that are higher in organic matter. Reduced rates may be used where partial control or reduced length of soil residual control is required (refer to **Table 2**).

Table 2. G-Max Application Rates per Acre[1,2]

As Determined By Soil Texture and Organic Matter Content		
Soil Texture	**Organic Matter Content**	
	Less than 3%	**3% or more[3]**
Coarse	2.5-3.0 pints	3.0-4.0 pints
Medium or Fine	3.0-4.0 pints	4.0-4.6 pints

[1] The rates listed are intended for full season control of targeted weeds. Reduced rates (1.5-3.0 pints of **G-Max** per acre) may be used where partial control or reduced length of soil residual control is required, such as postemergence applications, or pre-emergence applications where cultivation or sequentially applied herbicides will be used for added control of the same targeted weed species. Use 1.5-2.0, 2.0-2.5, and 2.5-3.0 pints of **G-Max** per acre on coarse, medium, and fine soil respectively.
For all early preplant applications, use 3.8-4.6 pints of **G-Max** per acre. Do not exceed 3.8 pints per acre on highly erodible soils with less than 30% plant residue cover prior to crop emergence.
[3] On all soils with 8-20% organic matter, use 3.8-4.6 pints of **G-Max** per acre. **G-Max** is not recommended for use on soils with more than 20% organic matter.

Application Timing

Preplant Surface Applications: For use in minimum tillage or no-tillage production systems, apply **G-Max** alone or in tank mixes up to 45 days before planting. When making early preplant applications (15-45 days prior to planting), use the highest rate recommended for the specific soil texture. Early preplant applications are not recommended for use on coarse-textured soils or in areas where average annual rainfall (or rainfall + irrigation) typically exceeds 40". 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 **G-Max** rate early followed by 1/3 of rate after planting). A split application is recommended when the initial application is made more than 30 days prior to planting. Tank mixes with postemergence herbicides such as **Clarity**®, **Gramoxone Extra**, **Roundup Ultra**®, or **Touchdown**® must be used when weeds are more than 1.5" tall at the time of application.
Preplant Incorporated Applications: Apply **G-Max** and incorporate into the upper (1-2") 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 may result.
Pre-emergence Surface Applications: 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 Applications: **G-Max** may be applied early postemergence to corn or sorghum up to 12" tall. Apply **G-Max** before weeds are greater than 1.5" tall or in a tank mix with products that control emerged weeds.

Split Applications: **G-Max** 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 **G-Max** rate used must not exceed the maximum rate given for each specific soil type. If applications are 2 weeks or more apart, a total **G-Max** use rate of up to 4.6 pints per acre per year may be used on any soil type.

Managing Off-target Movement

Spray Drift:
Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.
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 non target crops) 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.
To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information

may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

.NFORMATION ON DROPLET SIZE
The best drift management strategy and most effective way to reduce drift potential are 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 INVERSIONS).

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

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.

SWATH ADJUSTMENT
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up 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 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift

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

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 Methods 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 applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor, 2) nozzle orientation - nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should 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 **G-Max** by banding, determine the amount of herbicide and water volume 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 Methods and Equipment (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. Adequate spray volume must be used to provide accurate and uniform distribution of spray particles over the treated area and to avoid drift of spray particles to nontarget areas.

Application Equipment: Use nozzle screens no finer than 50 mesh.

Ground Application (Dry Bulk Fertilizer)

G-Max may be impregnated or coated onto dry bulk granular fertilizer carriers for preplant surface, preplant incorporated, or pre-emergence applications. Impregnation or coating may be conducted by either the in-plant bulk system or the on-board system. **G-Max** 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 **G-Max** in these application systems are responsible for following all state and local regulations regarding fertilizer and herbicide blending. The addition of a drying agent may be necessary if the fertilizer and herbicide blend is too wet for uniform application due to 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 recommended for use with on-board impregnation systems. Under some conditions, fertilizer impregnated with **G-Max** may clog air tubes or deflector plates on pneumatic application systems. Mineral oil may be added to **G-Max** before blending with fertilizer to reduce plugging. Do not use drying agents when mineral oil is used. To avoid separation of **G-Max** and mineral oil mixes in cold temperatures, either keep mixture heated or agitated prior to blending with fertilizer. Mineral oil may be used at [illegible] Blending stations or on-board injection systems.

Apply 200-750 pounds of fertilizer and herbicide blend per acre. Application must be made uniformly to the soil to prevent possible crop injury and obtain satisfactory weed control. Impregnated fertilizer spread at half 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 (1-2") incorporation is desirable for improved weed control. Deeper incorporation may result in unsatisfactory weed control.

Formula to determine the herbicide rate when using dry bulk fertilizer applications:

$$\frac{\text{Pints or pounds of herbicide per acre}}{\text{pounds of fertilizer per acre}} \times 2{,}000 = \text{Pints or pounds of herbicide per ton of fertilizer}$$

Incompatible Mixtures

Do not impregnate **G-Max** or **G-Max** 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 **G-Max** alone.

III. Additives

Spray adjuvants have little or no influence on performance of **G-Max** when applications are made prior to weed emergence. To improve burndown of emerged weeds, surfactants or low-rate fertilizer (28%, 30%, or 32% UAN or ammonium sulfate), or crop oil concentrate may be used with **G-Max** alone or in tank mixes applied preplant, pre-emergence, or early postemergence to the crop. Consult your local BASF representative for recommendations for your area.

Nitrogen Source

- **Urea ammonium nitrate (UAN):** Use 1-2 gallons of UAN (commonly referred to as 28%, 30%, or 32% nitrogen solution) per 100 gallons spray solution. Do not use brass or aluminum nozzles when spraying UAN.
- **Ammonium sulfate (AMS):** AMS at 8-17 pounds per 100 gallons spray solution may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. 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

The standard label recommendation is 1-2 quarts of an 80% active nonionic spray surfactant per 100 gallons of spray solution.

Oil Concentrate

Crop oil concentrates are allowed after crop emergence only when **G-Max** is used alone or in tank mixes with atrazine. See the manufacturer's label for specific rate recommendations. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic,
- contain only EPA-exempt ingredients,
- provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable 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**.

Table 3. Additive Rate

Additive	Rate
Nonionic Surfactant	1-2 quarts per 100 gallons
AMS	8-17 pounds per 100 gallons
UAN Solution	1-2 gallons per 100 gallons
Crop Oil Concentrate	1 quart per acre*

*See manufacturer's label for specific rate recommendations.

25/29

IV. General Tank Mixing Information

G-Max may be tank mixed with one or more herbicide products according to the crop specific tank mixing instructions in this label and respective product labels. Refer to section **VI. Crop-Specific Information** to determine which tank mix products can be applied to specific crops.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **G-Max** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend using tank mixes other than those listed on BASF labeling. Local agricultural authorities may be a source of information when using other than BASF recommended tank mixes.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

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.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended 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, nor fine particles that precipitate to the bottom, nor 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

1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2) **Agitation.** Maintain constant agitation throughout mixing and application.
3) **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
4) **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.
5) **Water-dispersible products** (such as **G-Max**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
6) **Water-soluble products.**
7) **Emulsifiable concentrates** (oil concentrate when applicable).
8) **Water-soluble additives** (such as AMS or UAN when applicable).
9) **Remaining quantity of water.**

Maintain constant agitation during application

V. Restrictions and Limitations

- **Restricted Use Pesticide:** This product is a restricted use herbicide due to ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.
- **Maximum seasonal use rate:** Do not apply more than a **total of 4.6 pints** of **G-Max** per acre, per season. **G-Max** contains 3.3 pounds of the active ingredient atrazine per gallon (0.41 pounds of a.i. per pint). When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, the total pounds of atrazine applied (lbs ai/A) must not exceed the specific seasonal rate limits from preemergence, or postemergence, or premergence + postemergence sequential applications, as noted below:

— **Prior to crop emergence:** Do not exceed 1.6 pounds of atrazine a.i. per acre on highly erodible soils with less than 30% plant residue cover. Do not exceed 2.0 pounds of atrazine a.i. per acre on other soils.

— **After crop emergence:** Do not exceed 2.0 pounds of atrazine a.i. per acre on any soil.

— **Prior to and after crop emergence (sequential applications):** Do not exceed 2.5 pounds of atrazine a.i. per acre on any soil.

- **Preharvest Interval (PHI):** Refer to section **VI. Crop-Specific Information** for crop-specific preharvest intervals and feeding and grazing restrictions.
- **Restricted Entry Interval (REI): 12 hours**
- **G-Max** is not for sale, distribution, or use in Nassau or Suffolk counties in New York state.
- **Crop Rotation Restriction:**

— If the crop treated with **G-Max** is lost to adverse weather or for other reasons, the area treated may be replanted to corn and grain sorghum immediately. If the original **G-Max** treatment was broadcast, do not make a second application of **G-Max** if the combined rate exceeds the maximum rate per season. If the original application was banded and the second crop is planted in the row middles, a second band application may be applied.

— Corn, sorghum, soybeans, cotton or peanuts may be planted the year following treatment. Injury may occur to soybeans planted on soils having a calcareous surface layer.

— Do not plant sugarbeets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small seeded legumes and grasses the year following application, or injury may occur.

— **Stress:** Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as injury may result.

- Do not apply through any type of **irrigation** equipment. Do not contaminate irrigation ditches or water used for domestic purposes.

VI. Crop-Specific Information

Corn (Field, Pop, Seed, and Sweet)

G-Max may be applied preplant surface, preplant incorporated, pre-emergence, or postemergence to corn up to 12" tall. Corn in this label refers to field corn (grown for grain, silage, or seed), sweet corn (not including sweet corn grown for seed), and popcorn. Before applying **G-Max** to seed corn, sweet corn, or popcorn, verify with your local seed company (supplier) the **G-Max** selectivity on your inbred line or hybrid to help avoid potential injury to sensitive hybrids.
Refer to section **II. Application Instructions** to determine **G-Max** use rates by soil type and use pattern.

Crop-Specific Restrictions and Limitations
Field corn forage may be grazed or fed to livestock 60-days or more after application of **G-Max**. Sweet corn forage may be grazed or fed to livestock 45-days or more after application of **G-Max**.

Corn Tank Mixes

G-Max may be tank mixed or applied sequentially in corn with one or more of the following 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 use on the specific corn types, as not all corn products are registered for use on seed, pop and sweetcorn. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- **Accent**®
- **Accent Gold**®
- **Atrazine**
- **Balance**® **Pro**[1]
- **Banvel**®
- **Basagran**®
- **Basis Gold**®
- **Beacon**®
- **Callisto**®
- **Clarity**®
- **Eradicane**®
- **Gramoxone**® **Extra**
- **Hornet**™
- **Laddok**® **S-12**
- **Liberty**®[2]
- **Lightning**®[3]
- **Marksman**®
- **Option**®
- **Outlook**®[4]
- **Princep**®
- **Prowl**®
- **Pursuit**®[3]
- **Ready Master**® **ATZ**[5]
- **Python**®
- **Roundup Ultra**®[5]
- **Steadfast**™
- **Touchdown**®
- **2,4-D**[6]

[1] To improve weed control of some species, particularly velvetleaf, tank mix 1.5 - 2.25 fluid ounces of **Balance**® **Pro** per acre with the recommended rate of **Guardsman Max.**
[2] Use only in **Liberty Link**® (glufosinate tolerant) corn hybrids.
[3] Use only in **Clearfield**® (imidazolinone tolerant) corn hybrids.
[4] Do not exceed a total of 0.98 pounds a.i. of dimethenamid-P per crop season.
[5] Includes postemergence tank mixes on **Roundup Ready** (glyphosate tolerant) corn hybrids.
[6] For preplant or preemergence use only. 2,4-D is not recommended for use within 7 days prior to or 3 days after planting. For preemergence applications, make sure seed furrows are closed and corn seed is covered by a minimum of 1.5" of soil to reduce the chance of injury.

Sorghum (grain)

G-Max may be applied preplant, preplant incorporated, preemergence or postemergence to grain sorghum up to 12" tall.
All **G-Max** 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.
Refer to section **II. Application Instructions** to determine **G-Max** use rates by soil type and use pattern. Do not use **G-Max** on sorghum planted in coarse-textured soil.
For best performance make preemergence surface applications within 5 days of the last preplant tillage. If grasses have emerged, **G-Max** must be applied before they reach the 2-leaf stage or must be used in combination with an effective postemergence herbicide. Under high soil moisture or cool conditions, **G-Max** application may cause temporary stunting or leaf wrapping of sorghum. Sorghum will normally outgrow these symptoms in 10-14 days.
G-Max is not registered for use on sweet or forage sorghum.
Sorghum forage may be grazed or fed to livestock 60 days or more after premergence application of **G-Max**. Sorghum forage may be grazed or fed to livestock 45 days or more after postemergence application of **G-Max**. Grain and fodder may be harvested and fed 80 days or more after application of **G-Max**.

Sorghum Tank Mixes

G-Max may be tank mixed or applied sequentially in sorghum with one or more of the following herbicide products according to the specific tank mixing instructions in this label and respective product labels. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- **Atrazine**
- **Basagran**®
- **Clarity**®[1]
- **Cyclone**™
- **Fallow Master**®
- **Gramoxone**® **Extra**
- **Laddok**® **S-12**
- **Landmaster**®
- **Paramount**®
- **Peak**®
- **Permit**
- **Roundup Ultra**®
- **Roundup Ultra**® **RT**

[1] Tank mix applications preplant only.

In addition to the tank mixes listed **G-Max** can be used in sequential applications with other herbicides labeled for use in grain sorghum such as: **Buctril**®, **Marksman**® **Weedmaster**® or 2,4-D.

Pests listed in this label:

Common Name	Scientific Name
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, Powell	*Amaranthus powellii*
Barnyardgrass	*Echinochloa crus-galli*
Buckwheat, Wild	*Polygonum convolvulus*
Chamomile, mayweed	*Anthemis cotula*
Carpetweed	*Mollugo verticillata*
Cocklebur, Common	*Xanthium strumarium*
Crabgrass, Large	*Digitaria sanguinalis*
, Smooth	*Digitaria ischaemum*
Cupgrass, Southwestern	*Eriochloa gracilis*
, Woolly	*Eriochloa villosa*
Eclipta	*Eclipta alba*
Flatsedge, Rice	*Cyperus iria*
Foxtail, Giant	*Setaria faberi*
, Green	*Setaria viridis*
, Yellow	*Setaria lutescens*
Goosegrass	*Eleusine indica*
Jimsonweed	*Datura stramonium*
Johnsongrass (seedling)	*Sorghum halepense*
Kochia	*Kochia scoparia*
Lambsquarters, Common	*Chenopodium album*
Millet, Wild Proso	*Panicum miliaceum*
Morningglory, Annual	*Ipomoea hederacea*
Mustard species	*Sinapis arvensis*
Nightshade, Black	*Solanum nigrum*
, Eastern Black	*Solanum ptycanthum*
, Hairy	*Solanum sarrachoides*
Nutsedge, Yellow	*Cyperus esculentus*
Oats, Wild	*Avena fatua*
Panicum, Fall	*Panicum dichotomiflorum*
, Texas	*Panicum texanum*
Pigweed, Prostrate	*Amaranthus blitoides*
, Redroot	*Amaranthus retroflexus*
, Smooth	*Amaranthus hybridus*
, Tumble	*Amaranthus albus*
Pusley, Florida	*Richardia scabra*
Purslane, Common	*Portulaca oleracea*
Red Rice	*Oryza sativa*
Ragweed, Common	*Ambrosia artemisifolia*
, Giant	*Ambrosia trifida*
Sandbur	*Cenchrus spp.*
Shattercane	*Sorghum bicolor*
Signalgrass, Broadleaf	*Brachiaria platphylla*
Smartweed species	*Polygonum spp.*
Spurge, Nodding	*Euphorbia nutans*
, Spotted	*Euphorbia maculata*
Velvetleaf	*Abutilon theophrasti*
Waterhemp, Common	*Amaranthus rudis*
, Tall	*Amaranthus tuberculatus*
Witchgrass	*Panicum capillare*

Crops

This product can be used on the following crops:

Corn (Field, Pop, Seed, and Sweet)
Sorghum, Grain

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 CORPORATION ("BASF") or the Seller. 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. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, 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.

007969-00192 20040204 NVA 2003-04-100-0253.pdf
NVA 2003-04-100-0136

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

Agricultural Products

BASF