Code 1569

Net Contents

EC Herbicide

A selective herbicide for the control of annual grasses and broadleaf weeds in soybeans. Do not use in California.

For Agricultural or Commercial Use Only

EPA Reg. No. 279-3104 **EPA Est. 279-**

Active Ingredients:	**By Wt.**
(α,α,α–trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine)	32.0%
*2-(2-Chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone	24.0%
Inert Ingredients:**	46.0%
	100.0%

*U.S. Patent No. 4,405,357
**Contains aromatic hydrocarbons

Contains a total of 5.25 pounds active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

FMC

FMC Corporation
Agricultural Chemical Group
Philadelphia PA 19103

2/95 DRAFT

FIRST AID

If in eyes: Flush eyes with plenty of water. Contact a medical doctor if irritation occurs and persists.

If swallowed: Contact a medical doctor or poison control center. Drink 1 or 2 glasses of water. Do not induce vomiting. Do not give anything by mouth to an unconscious person.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

If inhaled: Remove individual to fresh air. If not breathing, provide cardiopulmonary resuscitation assistance and get medical attention.

Notes to Physician: Commence EC has low oral, dermal and inhalation toxicity. It is mildly irritating to the eyes and slightly irritating to the skin. This product contains aromatic hydrocarbons that can produce a severe pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

For Emergency Assistance Call (800) 331-3148

See other panels for additional precautionary information.

PRECAUTIONARY STATEMENTS
Hazards to Humans (and Domestic Animals)

Caution
Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapor or spray mist. Causes mild eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment

Applicators and other handlers must wear. Long-sleeved shirt and long pants; Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, or Viton; Shoes plus socks.

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

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

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 outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water or wetlands (swamps, bogs or marshes). Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water by cleaning of equipment or disposal of wastes.

SPECIAL PRECAUTION

Off-site movement of spray drift or vapors of Commence EC herbicide can cause foliar whitening or yellowing of some plants. Prior to making applications, read and strictly follow all precautions and application instructions on this label.

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 through any type of irrigation system.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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: Long-sleeved shirt and long pants; Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, or Viton; Shoes plus socks.

STORAGE AND DISPOSAL

Pesticide Storage
Do not freeze. Do not store below 40°F. If solid crystals are observed, warm material to about 60°F by placing container in warm location. Shake or roll container periodically to redissolve solids.

Keep out of reach of children and animals. Store in original containers only. Store in a dry place. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC: (800) 331-3148.

To confine spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package in a holding container. Identify contents.

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

Container Disposal
Plastic Containers: Triple rinse (or equivalent). 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.

Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

Returnable/Refillable Sealed Containers: Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

GENERAL INFORMATION

Commence EC selective herbicide must be utilized as a soil incorporated treatment for the control of annual grass and broadleaf weeds in soybeans

Commence EC herbicide may be tank mixed with or followed by overlay or postemergence treatments of other soybean herbicides to broaden weed control spectrum compared to the products applied alone. Commence EC may be tank mixed with Lexone®, Freview®, Canopy®, Scepter® and Sencor® herbicides and applied preplant incorporated. Observe all precautions, instructions, and rotational cropping guidelines of each product's label when tank mixing, including all references to potential carryover and crop injury warnings or restrictions.

Water or liquid fertilizer may be used as a carrier for Commence EC when applied alone or when tank mixed with the herbicides listed above, unless use directions specifically state otherwise.

IMPORTANT

Failure to observe the application precautions section of this label may result in injury to desirable vegetation.

- Desirable plants including some species of trees, shrubs, flowers, agronomic crops, and fruits and vegetables are sensitive to Commence EC herbicide.
- Foliar contact with spray drift or vapors may cause whitening or yellowing of sensitive plants. Symptoms are generally temporary in nature but may persist on some plants.
- Carryover injury to approved rotational crops may result under extremely dry conditions. Choice of rotational crop hybrid, soil factors, and choice of other crop protection chemicals can impact the risk of injury to approved rotational crops. Refer to Rotational Cropping Precautions.

SPRAYER CLEANUP

Do not drain or flush equipment on or near desirable trees or other plants, or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots. Do not contaminate any body of water including irrigation water that may be used on other crops. Carefully follow sprayer clean-up instructions noted below to prevent spray tank residues from damaging other crops.

Sprayer equipment should be thoroughly cleaned to remove all traces of herbicide that might injure other subsequently sprayed crops. The steps below are suggested for the thorough cleaning of spray equipment following applications of Commence EC herbicide or tank mixes of Commence EC with other labeled products.

1) Drain any remaining spray solution from tank and discard in an approved manner (See Note below).
2) Thoroughly wash down the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Recycle water solution through the equipment for five minutes and dispose of in an approved manner (see Note below).
3) Fill tank with water while adding 1 quart of bleach and 1 pint of detergent for every 25 gallons of water. Operate the pump to circulate the solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
4) Start spray system up, recirculate for 15 minutes, then flush the solution out of spray tank through the boom.
   - When switching from water dilutions to applications utilizing crop oil or liquid fertilizer as a carrier, a small volume of crop oil or liquid fertilizer should be flushed through the tank, pump, hoses, and boom prior to the next use. Dispose of crop oil or liquid fertilizer rinsate in an approved manner (see Note for local, state and Federal guidelines).
5) Remove the nozzles, screens, and line filter and wash in a pail of warm, soapy water.
6) Flush the system with two tankfuls of water.

NOTE: Dispose of excess spray mixture and/or rinsates by application and incorporation to cropland as described on this label. If excess spray mixture and/or rinsates cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office for guidance.

GENERAL MIXING CONDITIONS

Commence EC Alone: Start with a clean spray tank. Fill sprayer ⅓ to ½ full with clean water or liquid fertilizer. Start agitation. Add correct quantity of Commence EC, continue agitation and finish filling the tank.

Tank Mixtures: Vigorous, continuous agitation is required for all tank mixes. Sparger pipe agitators generally provide the best agitation inspray tanks. To prevent foaming, avoid stirring or splashing air into the mixture during filling by placing the end of the fill pipe below the surface of the water in the spray tank. Do not allow the mixture to siphon back into the water source.

Mixing Order: Fill the tank ¼ to ⅓ full with clean water or liquid fertilizer. (See next page for additional liquid fertilizer mixing instructions.) Start the agitation. Add in the following order: dry flowables (DF) wettable powders (WP), aqueous suspensions (AS), flowables (F), and liquids (L) to the water and agitate until the product(s) are completely dis- persed. Allow additional mixing and dispersion time when using dry flowable products. Continue agitation and fill tank to ¾ full, add the Commence EC mix thoroughly. Maintain agitation during filling and through application. If spraying and agitation must be stopped before the tank is empty the materials may settle to the bottom. In this case it is important to resuspend all of the material in the bottom of the tank before continuing the spray application. A sparger agitator is particularly useful for this purpose. Sometimes it is more difficult to resuspend settled material than it is to suspend originally.

Read and carefully follow all label instructions for each material added to the tank. Premixing dry and flowable formulations with water (slurrying) and pouring the slurry through a 20 or 35 mesh wetting screen in the top of the tank will help assure good initial dispersion in the tank water. Line screens in the tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

If a buildup of material on the walls of the spray tank is observed, wash the tank with soapy water between fillings. Rinse and continue the spray-ing operation. Clean the tank, lines, and screens thoroughly after use.

As the spray volume per acre decreases the importance of accurate calibration and uniform application increases. Check the sprayer daily to ensure proper calibration and uniform application. Do not apply Commence EC when the wind can cause drifting of spray particles which can result in non-uniform application. When using drift reducing agents, follow specific product label instructions for order of addition to spray tank.

Liquid Fertilizer Mixing Directions: Emulsifiable concentrates, such as Commence EC, can be mixed with liquid fertilizers. In all cases, continuous agitation is required to prevent the Commence EC from rising to the surface as an oily layer. When necessary (see Liquid Fer-tilizer Compatibility Test below), a compatibility agent can be used to ensure that the Commence EC emulsifies properly (i.e., has a milky appearance rather than an oily layer). The use of compatibility agents is especially important when tank mixing emulsifiable concentrates (EC) with dry flowables (DF) wettable powders (WP) flowables (F) liquids (L), aqueous suspensions (AS), or solutions (S) in liquid fertilizer. If the emulsion is not properly formed, and the EC rises to the surface of the fertilizer as an oil ("oils out"), the oil may combine with the wettable powder, flowable, or suspension to form oily curds (viscous phase) which are difficult to disperse.

Any one of the compatibility agents listed below is helpful in causing emulsifiable concentrates to form non-oiling mixtures with liquid fertil-izers. These compatibility agents can be used at rates as low as one and one-half (1½) to two (2) pints per ton of liquid fertilizer and should be mixed well with the fertilizer before adding the emulsifiable concentrate.

Read the label on the compatibility agent and follow the directions.

1. Sponto 168D (Witco Chemicals Co., Chicago, IL)
2. Compat™ (Farm Chemicals, Inc., Aberdeen, NC)
3. Unite (Hopkins Ag Chemical, Madison, WI)
4. T-Mulz 734-2 (Thompson-Hayward Chemical Co., Kansas City, MO)
5. Rigo Compatibility Agent (Rigo Company, Buckner, KY)
6. Amoco Spray Mate™ (Amoco Oil Co., Chicago, IL)
7. Kem-Link™ (Universal Coop, Minneapolis, MN)

Each of the above is a phosphate ester type surfactant designed to be used with liquid fertilizers. They usually do not work well as compatibility agents in tank mixtures in water.

Testing for Tank Mix Compatibility in Liquid Fertilizers: Emulsifiable concentrates alone or in tank mixture with dry flowables (DF), wettable powders (WP), liquids (L), flowables (F), aqueous suspensions (AS), or solutions (S), may not combine properly with some fluid fertilizer mate-rials. Small quantities should always be tested before full scale mixing. This will determine whether a compatibility agent is needed and which agent does the best job. The compatibility agents listed above have been thoroughly tested. There are many other surfactants on the market which were not designed for use with liquid fertilizers.

Use the following test to select the correct agent for your mixture:

1. Put one (1) pint of the liquid fertilizer in a quart jar.
2. Add one (1) to four (4) teaspoonful(s) of the DF, WP, L, F, or AS formulation (depending on the recommended rate per acre) to the liquid fertilizer. Close jar and agitate until dispersed evenly in the fertilizer.

   If the materials do not disperse well, it may be necessary to slurry the chemicals in water before adding to the fertilizer.

3. After dispersing the materials (Step 2), add three (3) to four (4) teaspoonfuls of the Commence EC to the jar and shake well. Add solution herbicides to the mixture last and agitate. Observe the jar for about 10 minutes. If the materials rise to the surface and form a thick layer (oily curds), which will not disperse when agitated, a compatibility agent is needed. If the mixture is easily dispersed to its original state with slight agitation, no agent is needed, but good agitation must be provided in the fertilizer spray tank.
4. If the need for a compatibility agent is shown in Step 3, using a clean quart jar, start at Step 1 above, add one-half (½) teaspoonful of the compatibility agent to the liquid fertilizer, mix well, then repeat Steps 2 and 3.

An effective compatibility agent will cause the mixture to remain uniformly mixed with little or no separating or oil rising to the surface for one-half (½) hour or longer. If slight separation does occur, two (2) or three (3) inversions of the jar should give a uniform remix. If oil curds form which will not disperse, more agent or another agent should be tried.

Use a clean jar for each test. The compatible mixture will have a uniform appearance and will be relatively easy to keep mixed with gentle agitation of the jar.

APPLICATION PRECAUTIONS

Do not apply Commence EC within 1,000 feet of the areas listed below:
Towns and Subdivisions
Commercial Vegetable Production*
Commercial Fruit Production
Commercial Nurseries
Commercial Greenhouses

*except sweet corn

Plants such as the following may show symptoms of foliar whitening or yellowing if contacted by Commence EC. Symptoms are usually temporary in nature but may result in permanent injury if the exposure is excessive. It is recommended that, prior to application, adjacent properties be checked and that spraying within 100 feet of such desirable plants be avoided.

Trees (Deciduous)
- Apple (inc. fruit & ornamental types)
- Ash (Green, White, Mountain
- Basswood
- Boxelder
- Catalpa
- Cherry (inc. fruit & ornamental types)
- Cottonwood
- Elm
- Ginkgo
- Hackberry
- Mulberry
- Peach
- Pear (inc. fruit & ornamental types)
- Pecan
- Poplar
- Russian olive
- Tree-of Heaven
- Tulip tree
- Walnut trees
- Willow species

Trees (Evergreen)
- Fir Species
- Spruce species

Shrubs & Vines
- Azalea
- Burningbush (Winged Euonymus)
- Grape
- Honeysuckle
- Roses
- Yew

Agronomic Crops
- Alfalfa
- Oats

Vegetables and Flower plants

Others
- Ferns
- Herbs
- Strawberry
- Raspberry
- Blackberry

Apply Commence EC only to surfaces that will be incorporated. Do not apply Commence EC to non-field areas including fence rows, waterways, ditches, and road sides.

SPRAY DRIFT PRECAUTIONS

Non-target spray drift of Commence EC herbicide should be avoided to prevent whitening of desirable vegetation. Drift is influenced by many factors which include wind speed, spray pressure, particle size, nozzle type, and boom height.

- Do not apply when weather conditions favor drift. If wind speeds exceed 10 miles per hour, a drift reducing additive must be used.
- A minimum spray volume of 10 gallons per acre is recommended with appropriate nozzle types and sizes that produce coarser sprays.
- The use of agriculturally approved drift reducing additives is recommended for application volumes of 15 to 40 gallons per acre when spraying in the proximity of desirable plants (see list above).
- The use of an agriculturally approved drift reducing additive is required at finished spray volumes of 10 to 15 gallons per acre.
- Use minimum spray pressure and boom height maintaining uniform spray pattern.
- Do not exceed 40 psi spray pressure
- Selection and proper use of spray equipment is critical in minimizing spray drift. The following table suggests pressures, flow rates, and nozzle sizes for drift reduction using various nozzle types

Suggested Nozzle Types, Minimum Size and Recommended Pressure Ranges for Minimizing Drift

Nozzle	Pressure Range (PSI)	Minimum Flow Rate Within Pressure Range (GPM)	Minimum Nozzle Size
Flat-fan	15-30	0.3	#4*
LP-flat-fan	10-25	0.3	#3
Even flat-fan**	15-30	0.3	#4
Flood	10-25	0.3	#2.5*
Whirl-chamber	5-20	0.3	#5
Raindrop	15-40	0.15	#2
Wide angle full cone	15-40	0.3	#5

* Refers to tip number such as 8C04 or LF2.5.
** Recommended for banded application.

ROTATIONAL CROPPING PRECAUTIONS: Under some conditions, temporary whitening or yellowing of leaves may occur on approved rotational crops where undesirable soil residues of Commence EC exist.

Under abnormal conditions, carryover injury to rotational crops can occur. The following factors can contribute to increased risk of injury to rotational crops:
1) Exceeding label recommended rates.
2) Overapplication resulting from use of worn nozzles excessive overlapping of spray swaths, failing to shut off spray booms when turning (end row areas), or slowing or stopping sprayer.
3) Soil with pH less than or equal to 5.9.
4) Extreme dryness in the four months following application.
5) Use of organophosphate soil insecticides followed by use of some postemergence corn herbicides.
6) Choice of rotational crop hybrid.

Additional recommendations to prevent rotational crop injury may be provided in the form of service bulletins for locations where risk of injury is significantly increased due to extremely dry conditions.

Refer to Rotational Guidelines and replanting instructions of specific crops for additional crop planting information.

GENERAL USE PRECAUTIONS

APPLICATION AND ENVIRONMENTAL CONDITIONS:
Applied according to directions and under normal growing conditions Commence EC will not harm the treated crop. Overapplication may result in crop injury or a soil residue. Uneven application or improper soil incorporation of Commence EC can result in erratic weed control or crop injury. Seedling disease cold weather, deep planting excessive moisture, high salt concentration or drought may weaken crop seedlings and increase the possibility of damage from Commence EC. Under these conditions, delayed crop development or reduced yields may result. Application to soils with pH of 6.0 or lower may result in undesirable soil residues and greater potential for injury to rotational crops.

REPLANTING INSTRUCTIONS
If initial seeding of soybeans fails to produce a stand, soybeans may be replanted in fields treated with Commence EC alone (or with recommended tank mixtures). Do not retreat field with a second application of Commence EC. When tank mixing with a labeled product refer to the soybean replant instructions for that product. Do not replant treated fields with any crop at intervals which are inconsistent with the Rotational Guidelines on this label.

ROTATIONAL CROP/GRAZING AND FEEDING RESTRICTIONS:
The following rotational crops may be planted nine (9) months after the application of Commence EC. Do not rotate to any crops other than those listed below as crop injury may occur.

- Corn (Field, Sweet, Pop, Seed)
- Cotton
- Cucurbits
- Dry Beans
- Peanuts
- Peas
- Peppers
- Potatoes
- Rice
- Snap Beans
- Sweet Potatoes
- Tobacco
- Tomatoes (Transplanted)

In those areas where at least twenty (20) inches of irrigation and/or rainfall (total) was used to produce the soybean crop, sorghum should not be planted for twelve (12) months after an application of Commence EC. If less than twenty (20) inches of total water was used to produce the soybean crop, do not plant sorghum for eighteen (18) months after an application of Commence EC. Cool, wet weather conditions during the early stage of growth may increase the possibility of injury to sorghum.

In areas receiving greater than twenty (20) inches of rainfall per year, moldboard plow at least twelve (12) inches deep before planting sugar beets as a rotational crop. Do not rotate to sugar beets for thirteen (13) months after an application of Commence EC if less than twenty (20) inches of water was used to produce the soybean crop.

NOTE: Do not rotate to wheat, oats, barley, rye or alfalfa in the fall of the year of application or in the spring of the following year as crop injury may occur. Cover crops may be planted anytime but stand reduction may occur. Do not graze or harvest these cover crops for food or feed. Do not allow livestock to graze on treated soybean vines or feed treated vines or vine trash to livestock.

GENERAL APPLICATION INSTRUCTIONS

This Product Must Be Applied As A Preplant Incorporated Treatment.

Do not apply aerially or through irrigation equipment.

Ground Applications

Broadcast Application: Apply Commence EC alone or in tank mix combinations by ground equipment using a finished spray volume of 10 to 40 gallons of water per acre. **NOTE: The use of an agriculturally approved drift reducing additive is required at finished spray volumes of 10 to 15 gallons per acre.** Use nozzles suitable for broadcast boom application of herbicides. Coarse sprays are less likely to drift out of the target area than fine sprays. See "APPLICATION PRECAUTIONS" Section for specific recommendations to reduce spray drift.

INCORPORATION DIRECTIONS

General Directions: Use incorporation equipment that thoroughly mixes Commence EC into the top 2 to 3 inches of the final seedbed, or erratic weed control and/or crop injury may result. Incorporation equipment such as a disc will mix Commence EC approximately half as deep as the equipment is set to operate. For example a disc set to cut 4 inches deep will incorporate most of the Commence EC within the top 2 inches of soil.

Incorporation: Application and immediate incorporation to a depth of 2 to 3 inches is required unless the soil surface is dry. On dry soils, incorporation to a depth of 2 to 3 inches **MUST** be completed within 8 hours of Commence EC herbicide application. Soil must be in good tilth to allow for thorough mixing of the soil. Application to overly moist or wet soils will increase the potential for off-site movement of Commence EC herbicide vapors and may result in poor soil incorporation and unsatisfactory weed control.

A second incorporation is necessary, unless specifically stated, this time running the equipment in a different direction from the first. Incorporate the Commence EC uniformly into the top 2 to 3 inches of the final seedbed. Commence EC may be applied up to 3 weeks prior to planting.

Recommended Equipment
Any recommended incorporation tool may be used alone or in combination with any other recommended tool.

Disc: Set to cut 4 to 6 inches deep and operate at 4 to 6 mph.

Field Cultivator: Set to cut 3 to 4 inches deep and operate at 5 mph or more. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less and staggered so that no soil is left untumed. Chisel points should not be used.

Combination Seedbed Conditioners: Set to cut 3 to 4 inches deep and operate at a speed of at least 5 mph. These implements are defined as three or more tillage devices combined and used as a single tool. For example C- or S-shaped shanks with an effective sweep spacing of 6 to 9 inches (staggered so that no soil is left unturned) followed by a spike-tooth or flextine harrow, followed by a ground-driven reel or basket. Only one incorporation is necessary.

Rolling Cultivator: Set to cut 2 to 4 inches deep and operate at 6 to 8 mph. Rolling cultivators are adequate for use on coarse and medium textured soils only.

Bed Conditioner (Do-All): Set to cut 2 to 4 inches deep and operate at 4 to 6 mph. The Do-All is adequate for use on coarse and medium textured soils only.

Mulch Treader (other similar disc-type implements): Set to cut 3 to 4 inches deep and operate at 5 to 8 mph.

P.T.O. Driven Equipment (tillers, cultivators, hoes): Adjust to incorporate Commence EC into the top 2 to 3 inches of the seedbed with rotors spaced to provide a clean sweep of the soil. Only one incorporation is necessary. P.T.O. driven equipment should not be operated greater than 4 mph.

CULTIVATION AFTER PLANTING

Soil treated with Commence EC herbicide may be shallow cultivated without reducing the weed control activity of Commence EC. Do not cultivate deeper than the treated soil since this may bring untreated soil to the surface and poor weed control may result

WEEDS CONTROLLED BY COMMENCE EC:

Grass Weeds	
Annual bluegrass	Poa annua
Barnyardgrass (Watergrass)	Echinochloa spp.
Brachiaria (Signalgrass)	Brachiaria spp.
Bromegrass (Cheatgrass) (Downy brome)	Bromus tectorum
Cheat (Chess)	Bromus secalinus
Crabgrass (Large crabgrass) (Smooth crabgrass)	Digitaria spp.
Foxtail (Bottlegrass) (Bristlegrass) (Giant foxtail) (Green foxtail) (Foxtail millet) (Pigeon grass) (Robust foxtail) (Yellow foxtail)	Setaria spp.
Goosegrass (Silver crabgrass) (Silvergrass) (Wiregrass) (Yardgrass)	Eleusine indica
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colonum
Panicum, fall	Panicum dichotomiflorum
Panicum Texas (Buffalograss) (Coloradograss)	Panicum texanum
Sandbur (Burgrass)	Cenchrus incertus
Shattercane*	Sorghum bicolor
Spangletop (Lovegrass)	Leptochola filiformis
Stinkgrass (Lovegrass)	Eragrostis cilianensis
Woolly cupgrass	Eriochloa villosa
Broadleaf Weeds	
Carpetweed	Mollugo verticillata
Chickweed	Stellaria media
Florida pusley (Florida purslane) (Mexican clover) (Pusley)	Richardia scabra
Goosefoot	Chenopodium hybridum
Knotweed	Polygonum aviculare
Kochia (Fireweed) (Mexican fireweed)	Kochia scoparia
Lambsquarters	Chenopodium album
Pigweed (Carelessweed) (Prostrate pigweed) (Redroot) (Rough pigweed) (Spiny pigweed)	Amaranthus spp
Potatoweed (Smallflower)	Galinsoga spp.
Purslane	Portulaca oleracea
Russian thistle (Tumbleweed)	Salssola kali
Stinging nettle (Nettle)	Urtica dioica
Velvetleaf (Buttonweed)	Abutilon theophrasti
Venice mallow	Hibiscus trionium

Commence EC will provide partial control or suppression of the following weeds:

Jimsonweed	Redweed
Morninglory, annual	Smartweed, Pennsylvania
Prickly sida (Teaweed)	Spurred Anoda
Ragweed, common	

Control of these weeds may be erratic, ranging from poor to excellent depending upon soil temperature, time of weed germination, depth of weed seed in the soil and the amount and timing of soil moisture. Control may be improved with timely cultivation.

*Two pass incorporation required.

SOIL PREPARATION

Crop residues or Existing Weeds: Ground cover, such as crop residues or existing weeds, can interfere with the incorporation of Commence EC into the soil. A manageable level of such ground cover will allow the Commence EC to be uniformly incorporated into the top 2 to 3 inches of soil. If the level of the ground cover is such that this cannot be done, till the soil prior to the application of Commence EC.

Roughness: The soil surface should be smooth enough to operate the sprayer and incorporation equipment efficiently and at speeds which insure a uniform application and incorporation of Commence EC.

General Soil Conditions: To assure uniform incorporation of Commence EC, soil moisture conditions should be such that large clods can be broken up during the incorporation. Application to overly moist or wet soils will increase the potential for off-site movement of Commence EC herbicide vapors and may result in poor soil incorporation and unsatisfactory weed control.

SOIL TEXTURE GUIDE

The amount of Commence EC you apply will vary with the soil texture and organic matter. A fine textured soil will require more Commence EC per acre than a coarse soil. Choose the proper rate for each application based on the following soil texture group. Do not exceed recommended rates.

Soil Texture	Soil Classification
Coarse (light) Soils:	Sand, loamy sand, sandy loam
Medium Soils:	Loam, silty clay loam*, silt loam, silt, sandy clay loam*
Fine Soils:	Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*

*Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominantly sand or silt, they are usually classified as medium textured soils. If they are predominantly clay, they are usually classified as fine textured soils.

SOYBEAN APPLICATION RATES

Commence EC—Alone

Broadcast Rates Per Acre

Texture	Commence EC (Pints)
Coarse	1¾ to 2*
Medium	2 to 2 ¼*
Fine	2⅔

*Where rate range exists, select lower to higher rates within the ranges noted for lighter to heavier soil types within a textural group.

Commence EC—Tank Mix with Canopy® Herbicide.

The Commence EC/Canopy tank mix controls the annual grasses and broadleaf weeds controlled by Commence EC alone plus these additional weeds:

Cocklebur*	Smartweeds, Annual
Hophornbeam Copperleaf	Spotted Spurge
Jimsonweed	Sunflower*
Mustards	Spurred Anoda
Prickly Sida (teaweed)	Ragweed, Common
Morningglory, Annual*	Ragweed, Giant*
Sicklepod*	

Partial Control:

Eastern Black Nightshade	Nutsedge Species

Broadcast Rates Per Acre

Texture	Commence EC (pints)	Canopy (oz)
Coarse	1⅓ pts	6
Medium	2 pts	6 to 8*
Fine	2⅔ pts	7 to 10*

***NOTE:** Use the higher rates when heavier weed pressure is anticipated. Large seeded weeds germinating deep in the soil, such as cocklebur, morningglory, sicklepod, giant ragweed, and common sunflower or weeds with subsequent flushes may require a cultivation or an application of postemergence herbicide.

Additional Precautions:
Read the Canopy label carefully for cautions and precautions relating to environmental hazards planting of rotation crops, sprayer contamination and cleanup, soil pH organic matter and soil texture use restrictions, soybean variety planting restrictions, restrictions where Atrazine® or Sceptor were used the previous year, restrictions concerning use with organic phosphate pesticides, grazing restrictions and other directions, precautions and limitations.

Commence EC—Tank Mix with Lexone® or Sencor® Herbicides

The Commence EC/Lexone or Sencor tank mix controls the annual grasses and broadleaf weeds controlled by Commence EC alone plus these additional weeds:

Jimsonweed	Sesbania hemp
Mustard	Smartweed, Pennsylvania
Prickly Sida (Teaweed)	Spotted Spurge
Ragweed, common	Spurred Anoda

Commence EC/Lexone or Sencor tank mix also provides partial control or suppression of common cocklebur, annual morningglory and giant ragweed. Control of these weeds may be erratic ranging from poor to excellent depending upon soil temperature, time of weed seed germination, depth of weed seed in the soil and the amount and timing of soil moisture. Control may be improved with timely cultivation.

Broadcast Rates Per Acre

Soil Texture	Commence EC (pints)	Lexone 4L or Sencor 4F (pts)	Lexone DF or Sencor DF (lbs)
Coarse	1⅓ pts	⅓ to ½	¼ to ⅓
Medium	2 pts	½ to ¾	⅓ to ½
Fine	2⅔ pts	¾	½

***NOTE:** Use the higher rate in the rate range for Lexone or Sencor where weed populations are dense or for the control of wild mustard. Also, for best control of common cocklebur, annual morningglory and giant ragweed, use the higher rate in the rate range for Sencor and Lexone on coarse soils.

Additional Precautions: Do not use Commence EC in combination with Lexone or Sencor on soils with less than 0.5% organic matter, on sand, or on loamy sand with less than 2% organic matter, or on soils having a calcareous surface area or a pH of 7.5 or higher as Lexone or Sencor injury to soybeans may occur.

Commence EC—Tank Mix with Preview® Herbicide.

The Commence EC/Preview tank mix controls the annual grasses and broadleaf weeds controlled by Commence EC alone plus these additional weeds:

Cocklebur*	Prickly Sida (teaweed)
Common Ragweed	Smartweed, Annual
Hophornbeam Copperleaf	Spurred Anoda
Jimsonweed	Spotted Spurge
Mustards	Sunflower*

Partial Control:

Eastern Black Nightshade	Nutsedge Species
Ragweed, Giant*	

Broadcast Rates Per Acre

Soil Texture	Commence EC (pints)	Preview (oz)
Coarse	1⅓ pts	6
Medium	2 pts	6 to 7
Fine	2⅔ pts	8*

***NOTE:** Use the higher rates when heavier weed pressure is anticipated. Large seeded weeds germinating deep in the soil, such as cocklebur and common sunflower or weeds with subsequent flushes may require a cultivation or an application of postemergence herbicide.

Additional Precautions:
Read the Preview label carefully for cautions and precautions relating to environmental hazards planting of rotation crops sprayer contamination and cleanup, soil pH, organic matter and soil texture use restrictions, soybean variety planting restrictions, restrictions where Atrazine® or Scepter were used the previous year, restrictions concerning use with organic phosphate pesticides, grazing restrictions and other directions, precautions and limitations.

Commence EC—Tank Mix with Scepter® Herbicide.

The Commence EC/Scepter tank mix controls the annual grasses and broadleaf weeds controlled by Commence EC alone plus these additional weeds:

Eastern Black Nightshade	Partial Control:
Common Cocklebur	Mustards
Common Ragweed	Giant Ragweed
Common Sunflower	Wild Poinsettia
Jimsonweed	
Palmer amaranth	
Pennsylvania smartweed	
Prickly Sida (teaweed)	

Broadcast Rates Per Acre

Soil Texture	Commence EC (pts./fl. oz.)	Scepter (pts.)
Coarse	1⅓ pts	⅓
Medium	2 pts	⅓
Fine	2⅔ pts	⅓

Additional Precautions:

1. Do not use the Commence/Scepter tank-mix in the "Northern Use Area" as defined by the Scepter label.
2. The use of Scepter is limited to those states listed on the Scepter label.
3. Certain severe restrictions apply to corn, wheat and other rotational crops following an application of Scepter. Be sure to refer to the Scepter label for complete details of these and other restrictions.

Read the Scepter label carefully for cautions and precautions relating to environmental hazards, planting of rotation crops, sequential program uses of Scepter harvest restrictions following postemergence treatments of Scepter use of Scepter in conjunction with Classic®, Canopy®, or Gemini®, grazing restrictions and other directions precautions and limitations before applying Scepter. The use of Scepter is limited to those states listed on the Scepter Label.

Commence EC—Overlay Treatments

Preemergence herbicides approved for use on soybeans may be applied following preplant incorporated treatments of Commence EC alone or in tank mix combinations with Laxone, Preview, Scepter, Sencor, or Canopy for control of additional weed species listed on the preemergence product labels. Read and follow the precautionary statements, directions for use, rates of application and all other information that appears on the product labels. For overlay treatments with Scepter see Additional Precautions section under Commence EC tank mix with Scepter Herbicide.

Commence EC—Postemergence Treatments

Postemergence herbicides approved for use on soybeans may be applied following preplant incorporated treatments of Commence EC alone or in tank mix combinations with Laxone Preview Scepter Sencor, or Canopy for control of emerged weeds as listed on the postemergence product labels. Read and follow the precautionary statements, directions for use, rates of application and all other information appearing on the product labels.

COMMENCE EC HERBICIDE FOLLOWED BY ACIFLUORFEN (BLAZER® OR TACKLE®) HERBICIDE

Following a soil incorporated application of Commence EC or tank mixture with Commence EC, a postemergence application of acifluorfen will control the following emerged broadleaf weeds:

Broadleaf Weeds
Common Cocklebur
Hemp sesbania
Eastern Black Nightshade
Wild Mustard
Purple Moonflower
Pitted Morningglory

Apply acifluorfen at a rate of 1 pint per acre with .25% crop oil concentrate to actively growing weeds at no more than the 4-leaf growth stage (do not count cotyledonary leaves but only the fully developed true leaves). This timing generally correlates to soybean growth stages of the first to third trifoliate leaves.

NOTE: Application of Commence(R) EC herbicide generally retards the development rate of weeds which may extend the period where acifluorfen can be effectively applied.

Read and follow all precautions, restrictions, and warnings on all product labels.

COMMENCE EC HERBICIDE FOLLOWED BY SCEPTER® HERBICIDE

Following a soil incorporated application of Commence EC or tank-mixtures with Commence EC a postemergence application of Scepter herbicide will control the following emerged broadleaf weeds:

Broadleaf Weeds
Cocklebur
Pigweed
(Palmer)
(Smooth)
(Tall Waterhemp)

Apply Scepter after crop emergence but before weeds exceed a height of 12 inches. Apply at a broadcast rate of ⅓ pints per acre. Apply when weeds are actively growing. DO NOT apply Scepter postemergence when soybeans and weeds have been subjected to stress conditions such as temperature and moisture extremes. The total amount of Scepter should not exceed one half pint per acre per season.

For postemergence applications, the addition of a nonionic surfactant or crop oil concentrate is required. The nonionic surfactant approved for use on growing crops should contain at least 80% active ingredient and should be applied at a rate of 2 pints per 100 gallons of spray mixture Apply the crop oil concentrate (COC) at the rate stated on the COC label

Additional Precautions:

Read the Scepter label carefully for cautions and precautions relating to environmental hazards planting of rotation crops, sequential program uses of Scepter, harvest restrictions following postemergence treatments of Scepter, use of Scepter in conjunction with Classic®, Canopy®, Preview®, or Gemini®, grazing restrictions and other directions, precautions and limitations before applying Scepter. The use of Scepter is limited to those states listed on the Scepter label. If a Commence/Scepter preplant incorporated tank mix was used as the initial treatment, this sequential postemergence application can only be used in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee and Texas.

COMMERCIAL IMPREGNATION AND APPLICATION OF COMMENCE EC ON DRY BULK FERTILIZERS

Commence herbicide may be impregnated on dry bulk fertilizers. When applied as directed Commence/dry bulk fertilizer mixtures provide weed control equal to that provided by the same rates of Commence EC applied in water.

The Commence/fertilizer mixtures must be soil incorporated. For best results, Commence should be incorporated two times when applied impregnated on dry bulk fertilizers. The second incorporation should be delayed at least (5) days after the first completed prior to planting, and should be run in a different direction from the first. Follow other Commence label recommendations for soil incorporation.

Impregnation: Apply using a minimum of 200 pounds of dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre with the recommended amount of Commence EC herbicide per acre. Use a closed rotary-drum mixer or a similar type of closed blender equipped with suitable spray equipment. The spray nozzle(s) should be positioned to provide a uniform, fine spray pattern over the tumbling fertilizer for thorough coverage. The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with Commence provides a satisfactory, dry mixture. If the absorptive capacity is inadequate, use of a highly absorptive powder is required to provide a dry, flowable mixture. Microcel E (Johns-Manville Products Corporation) is a recommended absorbent powder. Generally less than 2% by weight of Microcel E is required. **DO NOT** impregnate Commence EC onto straight coated ammonium nitrate or straight limestone because these materials will not absorb the herbicide. Dry fertilizer blends containing mixtures of ammonium nitrate or limestone may be impregnanted with Commence.

The amount of Commence actually required in the preparation of individual fertilizer mixtures should be determined carefully for each production operation. This is necessary to ensure that the amount of pesticide actually contained in the mixture applied to the soil represents the correct rate of use. Bulk fertilizer impregnated with Commence EC herbicide should be applied immediately, not stored. Care should be taken to ensure spreading procedures in the field do not place fertilizer treated with Commence in areas which cannot be incorporated. All state regulations, labeling, etc., of the mixtures are the responsibility of the seller.

For those rates not listed in the following table calculate the amount of Commence EC to be impregnated on a ton of dry bulk fertilizer using the following formula:

$$\frac{2000}{\text{pounds dry fertilizer per acre}} \times \text{PINTS of Commence per acre (recommended rate for soil texture)} = \text{PINTS of Commence per ton of fertilizer}$$

RATE CHART FOR IMPREGNATION OF DRY BULK FERTILIZERS WITH COMMENCE EC HERBICIDE

PINTS OF COMMENCE EC PER TON OF FERTILIZER

Fertilizer Rate Lbs./Acre	Commence EC Rate Per Acre 1¾ pts. (1.15 lbs A.I.)	2 pt. (1.31 lbs A.I.)	2 ¼ pts (1.48 lbs A.I.)	2⅔ pts. (1.75 lbs A.I.)
200	17 ½	20	22 ½	26 ⅔
250	14	16	18	21 ⅓
300	11 ⅔	13 ⅓	15	17 ⅚
350	10	11 ⅔	12 ⅞	15 ¼
400	8 ¾	10	11 ¼	13 ⅓
450	7 ¾	8 ⅚	10	11 ⅞

If fertilizer materials are excessively dusty, use diesel oil or other suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. Crop injury and/or poor weed control may occur where the impregnated fertilizer is not uniformly applied.

Special Precautions

- All equipment used to apply Commence should be thoroughly cleaned immediately following use to ensure no contamination results which could cause injury to non labeled crops or desirable vegetation. Refer to "Sprayer Cleanup" section for additional details and disposal of rinsates

- Equipment used to physically transport Commence treated fertilizer, including boots, augers conveyers, bins, etc. should be covered to prevent loss of fine particles and subjected to cleanup procedures previously described.
- Mixing of Commence herbicide and dry fertilizer should be conducted in a blender which will ensure airborne particles and potential for volatilization are avoided.
- Bulk containers should be tightly covered while the product is being transported and applied to reduce chances of Commence volatilization or product loss.
- It is recommended that Dry Bulk Fertilizer impregnation operations using Commence not be conducted within 1/4 mile of residential areas or areas where Commence symptomology on desirable vegetation would not be tolerated.

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions:

Warranty: FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at his own risk.

Use of Product: FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

(1097-3/6/90-A)