

Reg # 55947-46

PM-25

12/16



27.250 in

Clarity™

HERBICIDE For Weed Control in Corn.

Active Ingredients:

glicambate:

Diglycolamine® salt of

3,6-dichloro-o-anisic acid*

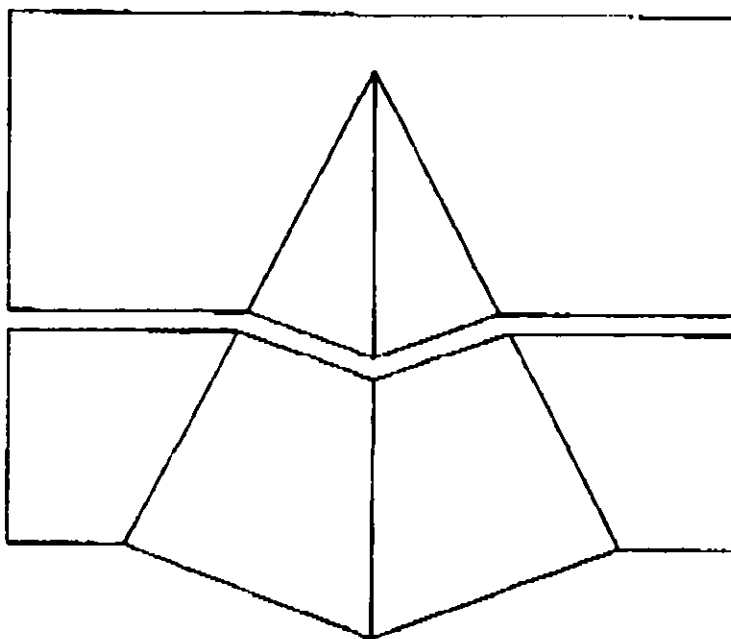
..... 56.8%

Inert Ingredients:

..... 43.2%

Total 100.0%

* This product contains 38.5%
3,6-dichloro-o-anisic acid or
4 pounds per gallon (480 g/L)



ACCEPTED

OCT 13 1992

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 55947-46

EPA Reg. No. 55947-46

EPA Est. No. 55947-TX-1

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE BACK PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

 **SANDOZ**

NET CONTENTS: 2.5 GALLONS (9.46 L)

RON K GRAPHIC SERVICES LTD
DISC Sandoz Clarity Adaba Illustrator
10-02-92 1st Futura
Job No 921094-921050 Sandoz Clarity Label
Galleys 01



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CLARITY **TM**

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Herbicide

For Weed Control in Corn.

DIRECTIONS FOR USE

EPA Reg No. 55947-46

Net Contents: 2 1/2 gallons

Sandoz Agro Inc.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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See additional precautionary statements at end of label booklet.

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Registered Trademarks

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

CLARITY is registered and used for broadleaf weed control in field, seed, popcorn and silage corn.

CLARITY is not registered for use in sweetcorn.

Before applying **CLARITY** Herbicide, read all directions and precautions appearing on the container label and in this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

GENERAL INFORMATION

CLARITY is registered for the control of many annual, and control or suppression of many perennial broadleaf weeds found in corn (see GENERAL WEED LIST). **CLARITY** is absorbed by leaves, roots and shoots to give both contact and soil residual broadleaf weed control.

Do not treat irrigation ditches or water used for crop irrigation or domestic uses.

Do not apply this product through any type of irrigation system.

Do not apply **CLARITY** to seed corn or popcorn without first verifying with your local seed corn company (supplier) the **CLARITY** selectivity on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Direct contact of **CLARITY** with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the soil surface, delay application until corn has emerged.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

ENVIRONMENTAL CONDITIONS

Applications of **CLARITY** to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3-7 days with no subsequent yield reduction. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

For best performance, rainfall or irrigation should not occur for 4 hours after treatment if application is made to emerged weeds greater than 3 inches tall.

SENSITIVE CROP PRECAUTIONS

CLARITY may cause injury to desirable broadleaf plants such as tobacco and soybean.

Do not allow spray from application equipment to drift onto sensitive broadleaf crops.

Always select nozzles designed to produce coarse sprays without producing fine spray particles. Fine spray particles can be blown by wind onto sensitive broadleaf crops. Avoid making applications when spray particles can be carried by wind to areas where sensitive broadleaf crops or plants are growing.

Agriculturally approved drift reducing additives may be used.

Thoroughly clean spray equipment after use to avoid spray tank contamination which can result in injury when subsequent applications are made to broadleaf crops. (see PROCEDURE for CLEANING SPRAY EQUIPMENT)

Use in corn is intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in catastrophic crop failure from hail, flood etc., injury may occur if a sensitive broadleaf crop is used for plantback.

BAND TREATMENTS

CLARITY may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

Band width
in inches

$$\begin{array}{ccccc} \text{Row width} & & \text{Broadcast} & & \\ \text{in inches} & \times & \text{RATE} & = & \text{Band RATE} \\ & & \text{per treated acre} & & \text{per treated acre} \end{array}$$

Band width
in inches

$$\begin{array}{ccccc} \text{Row width} & & \text{Broadcast} & & \\ \text{in inches} & \times & \text{VOLUME} & = & \text{Band VOLUME} \\ & & \text{per treated acre} & & \text{per treated acre} \end{array}$$

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COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint
of Spray Carrier
(Assuming Volume is 25 Gallons per Acre)

HERBICIDE FORMULATIONS	RATE PER ACRE	LEVEL TEASPOONS
Dry	1 lb.	1 1/2
Liquid	1 pt.	1/2

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

CLARITY Herbicide, when applied at recommended rates, will control many ANNUAL broadleaf weeds and give growth suppression of many PERENNIAL broadleaf weeds commonly found in corn.
For best performance, make applications when weeds are emerged and actively growing.

ANNUALS

Buckwheat, Wild
Burclover, California
Burbucumber
Carpetweed
Chickweed, Common
Clovers (Annual)
Cocklebur, Common
Jimsonweed
Knotweed
Kochia
Kochia (triazine resistant)
Ladysthumb
Lambsquarters, Common
Lambsquarters
(triazine resistant)
Mallow, Common
Mallow, Venice
Morningglory, Ivy leaf
Morningglory, Tall
Mustard, Tansy
Mustard, Wild
Mustard (Yellowtops)
Nightshade, Black
Pigweed, Prostrate
Pigweed, Redroot
(Carelessweed)
Pigweed, Rough
Pigweed, Smooth
Pigweed (triazine resistant)
Pigweed, Tumble
Puncturevine
Purslane, Common
Ragweed, Common
Ragweed, Giant (Buffaloweed)
Ragweed Lance-Leaf
Sicklepod
Sida, Prickly (Teaweed)
Smartweed, Green
Smartweed, Pennsylvania
Spikeweed, Common
Spanish needles
Spurge, Prostrate
Sunflower, Common (Wild)
Sunflower, volunteer
Thistle, Russian
Velvetleaf
Waterhemp

PERENNIALS

Alfalfa
 Artichoke, Jerusalem
 Bindweed, Field
 Clover, Hop
 Dandelion, Common
 Dock Broadleaf (Bitterdock)
 Dock, Curly
 Dogbane, Hemp
 Horsenettle, Carolina
 Mare's Tail (Horseweed)
 Milkweed, Climbing
 Milkweed, Common
 Milkweed, Honeyvine
 Nightshade, Silverleaf
 (White Horsenettle)
 Pokeweed
 Smartweed, Swamp
 Sowthistle
 Thistle, Canada
 Vetch

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MIXING AND APPLICATION

CLARITY is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see COMPATIBILITY TEST on page 11) should be made prior to tank mixing. The use of fluid fertilizer as a carrier may damage emerged corn.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used. HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SENSITIVE CROPS ARE GROWING IN THE VICINITY OF THE AREA TO BE TREATED.

Apply 3 to 50 gallons of diluted spray per treated acre when using ground application equipment, or 2 to 10 gallons of diluted spray per treated acre when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation.

CLARITY should not be applied during periods of gusty wind or when wind is in excess of 15 mph as uneven spray coverage may occur. If spraying in vicinity of sensitive crops refer to "SENSITIVE CROP PRECAUTIONS".

Avoid disturbing (e.g. tillage or cultivating) treated areas for at least 7 days following application.

Up to 2 applications of CLARITY may be made during a growing season. Do not exceed a total of 24 fluid ounces of CLARITY per treated acre per crop year. Allow two weeks or more between applications of CLARITY. See appropriate section for rate information. For combination options or sequential treatments, refer to appropriate section.

SPRAY ADDITIVES

Always add sprayable fluid fertilizers (1¹/₂-1 gallon per acre of 28%, 30% or 32% urea ammonium nitrate) to the spray mixture to improve postemergence velvetleaf control.

Agriculturally approved surfactants may also be added to the mixture to improve postemergence weed control, particularly in dry growing conditions.

The use of adjuvants containing penetrants, such as petroleum based oils, may be added to the mixture to improve postemergence weed control in dry growing conditions. Do not use penetrants after the corn exceeds five inches tall or crop injury may result.

PREPLANT/PREEMERGENCE IN NO-TILLAGE CORN

Applications of CLARITY may be made before, during, or after planting to emerged and actively growing broadleaf weeds. Apply CLARITY at 16 fluid ounces per treated acre on medium or fine textured soils containing 2% or greater organic matter. Use 8 fluid ounces per treated acre on coarse textured soils (sand, sandy loam, and loamy sand) or medium and fine textured soils with less than 2% organic matter. The addition of a nonionic surfactant is recommended for improved spray coverage of emerged weeds.

When planting into a legume sod (e.g., alfalfa or clover), apply CLARITY after 4-6 inches of regrowth has occurred. For added control of dandelion or plantain, 2,4-D at 1/4 to 1/2 pounds ai per acre may be tankmixed with CLARITY.

PREEMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

CLARITY may be applied after planting and prior to corn emergence. Application at 16 fluid ounces per treated acre may be made to medium or fine textured soils which contain 2% or greater organic matter. For best performance delay application 5-7 days following planting. DO NOT apply to coarse textured soils (sand, sandy loam, and loamy sand) until after crop emergence (see Early Postemergence uses below).

Preemergence application of CLARITY does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags,

harrows) which concentrate treated soil over seed furrow.

**EARLY POSTEMERGENCE
(ALL TILLAGE SYSTEMS)
(Spike through 8 inch tall corn)**

CLARITY at 16 fluid ounces per treated acre may be applied during the period from corn emergence through 8 inch tall corn. Reduce the rate to 8 fluid ounces per treated acre if corn is growing on coarse textured soils (sand, sandy loam, loamy sand).

When CLARITY is tankmixed with Accent or Beacon, applications may be made up through 12 inch tall corn. See TANK MIX section for more information.

OVERLAY (SEQUENTIAL) TREATMENTS

CLARITY may be applied to ground before or after treatment with one or more of the following herbicides:

alachlor (Lasso®, Lasso® Micro Tech
or Partner®)
Atrazine
Bicep®
Bronco®
Bullet®
butylate (Sutan®)
cyanazine (Bladex®)
dicamba (Banvel®)
EPTC (Eradicane®)
Extrazine®
glyphosate (Roundup®)
Lariat®
Marksman®
metolachlor (Dual®)
nicosulfuron (Accent®)
paraquat (Gramoxone®)
pendimethalin (Prowl®)
primisulfuron (Beacon®)
propachlor (Ramrod®)
simazine (Princep®)

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Apply CLARITY at 8 ounces per treated acre on ground previously treated with full rates of Banvel or Marksman.

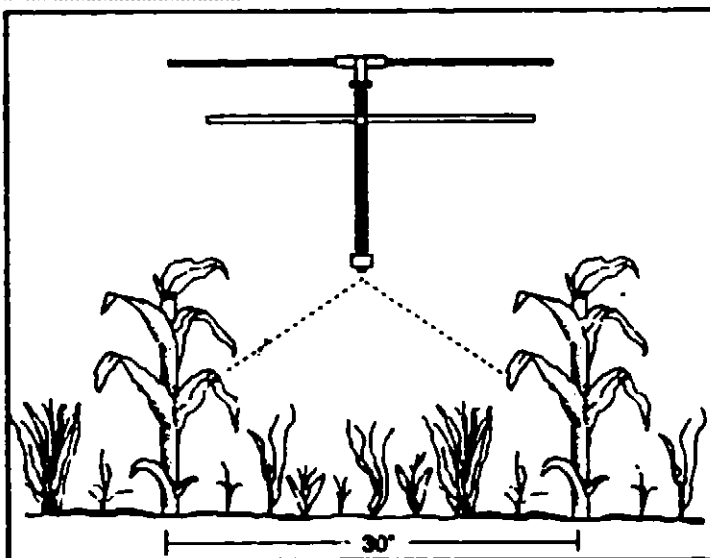
Apply Banvel at 1/2 pint per treated acre or Marksman at 2 pints per treated acre to ground previously treated with a full rate of CLARITY. Applications must be separated by two weeks or more.

READ AND FOLLOW LABEL DIRECTIONS FOR EACH OF THE ABOVE PRODUCTS.

TANK MIX TREATMENTS FOR CORN

CLARITY may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, and other restrictions. Tank mix recommendations are for use only in states where the tank mix product and application site are registered.

CLARITY + Accent: Accent may be tankmixed with **CLARITY** for added postemergence grass control. Apply Accent at 1/2 - 1 ounce ai per acre to emerged weeds but before corn exceeds 12 inches tall. When corn is 8 - 12 inches tall make sure the boom is adjusted to direct the spray under the corn canopy. This will avoid spray pattern interference and overdosing the corn plant. Refer to diagram below when post directing spray. Use non-ionic surfactant at 0.25% (v/v) with this tankmix.



Proper setup to broadcast when corn is 8 to 12 inches tall.

CLARITY + Atrazine: Apply Atrazine at 1 1/4 - 2 pounds ai per acre up to 8 inch tall corn. For added grass control crop oil concentrate may be added to this mixture if corn is less than 5 inches tall and grass weeds are emerged but less than 1 1/2 inches tall. Follow all application restrictions on the Atrazine label.

CLARITY + Beacon: Beacon may be tankmixed with **CLARITY** for added postemergence grass control. Apply Beacon at 0.25 - 0.57 ounce ai per acre to emerged weeds but before corn exceeds 12 inches tall. When corn is 8 - 12 inches tall make sure the boom is adjusted to direct the spray under the corn canopy. This will avoid spray pattern interference and overdosing the corn plant. Use non-ionic surfactant at 0.25% (v/v) with this tankmix. For proper boom positioning refer to diagram in the **CLARITY + Accent** tankmix section.

CLARITY + Bladex® : Apply Bladex at 1 1/4 - 4 pounds ai per acre prior to corn emergence. After corn emergence use only the 90DF formulation at 1 1/4 - 2 pounds ai per acre. Applications should be made before grasses are 1 1/2 inches and before the corn is beyond the 4 leaf stage.

CLARITY + Dual® : Apply Dual at 1 1/2 - 3 pounds ai per acre for added grass control. Applications can be made after planting but before corn exceeds 3 inches tall and before grasses exceed the 2 leaf stage. Applications prior to crop emergence may only be made on medium or fine textured soils containing 2 1/2 % or greater organic matter.

CLARITY + Gramoxone® : Apply Gramoxone at 1/4 - 1 pound ai per acre. Application may be made to emerged weeds but prior to corn emergence.

CLARITY + Lasso®, Lasso® Micro Tech or Partner®: Apply Lasso, Lasso Micro Tech or Partner at 2 1/2 - 3 pounds ai per acre. Applications may be made after planting and before grass emergence. Applications may only be made on medium or fine textured soils containing 2 1/2 % organic matter or greater.

CLARITY + Princep® : Apply Princep at 1 - 3 pounds ai per acre prior to corn or weed emergence.

CLARITY + Prowl® : Apply Prowl at 3/4 - 1 1/2 pounds ai per acre. Applications can be made after planting before corn exceeds the 2 leaf stage of growth and before grass weed emergence. Application prior to crop emergence should only be made on medium or fine textured soils with 2 1/2 % or greater organic matter.

CLARITY + Roundup® : Apply Roundup at 1 - 3 pounds ai per acre to emerged weeds prior to crop emergence.

CLARITY + 2,4-D : Apply 2,4-D at 1/4 - 1/2 pounds ai per acre prior to crop emergence for added burndown of existing weeds.

CLARITY + Accent® + Dual® : Apply Accent at 1/4 - 1/2 ounces ai per acre and Dual at 3/4 - 1 1/2 pounds ai per acre. Application should be made after grass emergence and before grass is 3 inches tall. Use non-ionic surfactant at 0.25% (v/v) and 1/2 - 1 gallon liquid fertilizer with this tank mix.

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of CLARITY.

- 1) Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the

rinse water.

- 2) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply **CLARITY** as a tank mix with wettable powders (WP) emulsifiable concentrates (EC), or other types of water-dispersible formulations. **CLARITY** tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Avoid contact with skin, eyes or clothing. Harmful if swallowed. Avoid breathing spray mist. Wash thoroughly after handling. In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

ENVIRONMENTAL HAZARDS

Keep out of lakes, streams or ponds. 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 contaminate water when disposing of equipment washwaters.

Apply this product only as directed.

STORAGE AND DISPOSAL

PROHIBITIONS

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

STORAGE

Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Plastic or Metal: After triple rinsing (or equivalent), offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user. Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Sandoz makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty. In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Sandoz or seller for any and all claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of Sandoz or seller, the replacement of the product. Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or written agreement.

REGISTERED TRADEMARKS

Prowl® is a registered trademark of American Cyanamid Company.

Beacon® Bicep®, Dual®, and Princep® are registered trademarks of Ciba-Geigy Corporation, Agricultural Division.

Accent®, Bladex®, and Extrazine®, are registered trademarks of E. I. duPont de Nemours & Co., Inc.

Bronco®, Bullet®, Lariat®, Lasso® Micro Tech, Partner™, Ramrod®, and Roundup® are registered trademarks of Monsanto Agricultural Products Company.

Eradicane®, Gramoxone® and Sutan+® are registered trademarks of ICI Americas Inc.

Ba...el® Herbicide, and Marksman® Herbicide are registered trademarks of Sandoz Ltd.