

20UL Tree Growth Regulator

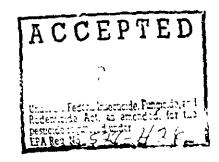
Complete Directions for Use

U.S. Patent No. 4 234 405 EPA Reg. No. 524 426

C-MONSANTO COMPANY 1989

*CLIPPER is a registered frademark of and used under license from Imperial Chemical Industries. PLC

1989-1- -858-25-000-01-5-3



Change to:

1990-1

858.25-00.09/53

l

BEST AVAILABLE COPY

11/28/89

Frad the entire laber before using this product

Le only according to label instructions

Fear LIMIT OF WARRANTY AND EIABILITY Detoce buy ing or using lifterms are not acceptable return at more creams.

HEFORMULATION IS PROHIBITED.

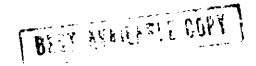
LIMIT OF WARRANTY AND LIABILITY

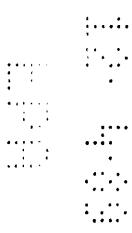
This isompany warrant, that this product conforms to the memical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for the label booketi. Directions I) when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY. IS IMADE. This warranty is also subject to the conditions and similations stated herein.

Buyer and all users shall promptly notify this Company tany claims whether based in contract inegligence crict frability lother tort or otherwise.

Euver and all users are responsible for all loss or damage. form use or handling which results from conditions revond the control of this Company including but not mifed to incompatibility with products other than those et forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather condi-" ons which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moistive range specified in the Directions or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation. THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE LIMIT OF THE CIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES. INTURIES OR DAMAGES RESULTING FROM THE USE OR HAND. ING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN ONTRACT NEGLIGENCE STRICT LIABILITY OTHER TOPT OR OTHERWISE! SHALL BE THE PURCHASE FT CE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED OR AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER. THE REPLACE **MENT OF SUCH QUANTITY OR IF NOT ACQUIRED BY** PURCHASE REPLACEMENT OF SUCH QUANTITY IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL CONSEQUENTIAL GR SPECIAL DAMAGES

Buyer and all users are deemed to have accepted the rerms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.





PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animais

Keep out of reach of children CONTAINS METHANOL



POISON



Get medical attention or Call a Poison Control Center

DANGER!

CONTAINS METHANOL WHICH IS FATAL OR MAY CAUSE BLINDNESS IF SWALLOWED

CANNOT BE MADE NON-POISONOUS

CAUSES IRREVERSIBLE EYE DAMAGE

LAUSES SKIN AND REPIRATORY TRACT IRRITATION

MAY BE HARMFUL IF INHALED

Do not get in every on skin or on crothing

Wear goggles or face shield and rubber gloves when handling

Avoid breathing vapor

Wash thoroughly with soap and water after handling and before eating drinking, or using tobacco.

FIRST AID IF SWALLOWED immediately get medical attention or call a poison control center. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF IN EYES immediately flush with plenty of water for at least 15 minutes. Get medical attention

IF ON SKIN immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Get medical attention, wash clothing before reuse.

IF INHALED remove individual to fresh air. Get med cal attention if breathing difficulty develops

NOTE TO PHYSICIAN Consideration should be given to the administration of ethanol in order to competitively interfere with metabolism of methyl alcohol to more toxic degradation products. Use general supportive measures in conjunction with scrupulous monitoring of acid base balance, electrolyte levels, and fluid intake.

In case of an emergency involving this product Call Collect day or night (314) 694 4000

Environmental Hazards

Do not apply directly to water or wetland. Do not conlaminate water when disposing of equipment wash waters.

Physical or Chemical Hazards

FLAMMABLE

Do not use or store near heat or flame

In case of

FIRE use water spray alcohol foam dry chemical or carbon dioxide **ACTIVE INGREDIENT**

Paciobutrazol (±) (R* R*: # (i4 chlorophenyi)

methyl]- α (1.1 dimethylethyl) $1\underline{\text{H}}$ 1.2.4

triazole 1 ethanol

251% 97 49%

INERT INGREDIENTS

100 004

DIRECTIONS FOR USE

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

Storage and Disposal

Do not contaminate water, foodstuffs, feed or seed by storage or disposal

STORAGE

Keep container closed. Store in a cool environment when not in use

DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess. pesticide, spray muxtures, or rinsate is a violation of Fed. eral law. If these wastes cannot be disposed of according to label use instructions, contact your state Pesticipe or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance

Emptied container retains vapor and product residue Observe all labeled safeguards until container is des troved, DO NOT CUT OR WELD ON OR NEAR THIS CON TAINER

Do not reuse container. Terple rince container, then punc ture and dispose of in-a canifary landfill or by other Discontines appropriate by chain and local authorities

GENERAL INFORMATION

This product can be used on amenity trees found in areas such as utility rights of-way, urban environments and other non-crop areas

Trunk injections of this product extend tree-trimming cycles by slowing regrowth of treated trees, allowing longer intervals between trimmings. This effect is achieved by inhibiting gibberellin biosynthesis which results in long-term growth reduction and internode compression on a wide range of trees. This product shows little or no phioem mobility. Activity occurs by sylem uptake from trunk injections. Once activated this product results in intensified green of foliage with no phytotoxicity. Applications can enhance flowering in some species.

Control Symptoms:

Results may not be visible following application of this product until up to 12 months after application. Initial effects of this product will be observed as an intense greening of foliage. At the time that normal vegetative growth extension should occur, trees treated with this product will exhibit shortened internodes which are somewhat thickened. Smaller leaf size and enhanced flowering may also be observed in some species.

Change to:

Dispose of unrinsed containers in accordance with state and local regulations.

APPLICATION DIRECTIONS

Do not dilute this product with water or solvents

This product may be applied at any time of the year HO wever, the likelihood of bark damage is increased from do mant applications, for best results, avoid applications to deciduous species after leaf drop in the fall an opinion to build break in the spring. Jormancy may be included by factors such as prolonged freezing weather or level; drought stress.

Do not reapply this product until effects of previous applications wear off or within 3 years of last application whichever comes first.

Table 1	CLIPPER#	20UL	TRUNK	INJECTION
	INJECTOR SPACING	AND	VOLUME	PER HOLE

Tree Species	iniector Spacing inchesi	volume / hole (mt)
Norway Maple	t	20 to 30
Red Maple	6	20 to 30
Silver Mapie	t	20 to 40
Sugar Maple	÷	20 to 30
Australian Pine	•	20 to 40
2 ∞eetg um	÷	10 to 30
Laurei (Jak		5û to 75
Mater Dak		50 to 75
Willow Gak	t	50 to 75
Live Oak	ž	50 to 75
Chinese Elm	£	25
Siberian Élm	ē	40
Sycamore spp.	£	100 to 150
{ vasiyatus -		- 75 to 100

Note to User: Specific recommendations for species and varieties or ornamental trees other than those list ed in Table 1 are under development. Since xylem ar rangement in trees can affect distribution of this product narrow (6 inches) injector spacing may be required in certain tree species. The professional user should determine the proper injector spacing to be used on tree species not specifically mentioned in Table 1. If in doubt, use the 6 inch spacing method.

Injection Techniques:

Injection holes should be uniformly spaced around the tree trunk and within 2 feet above the soil surface.

Orill injection holes angled slightly downward into the trunk at 45° to 60° angle to the plane of the trunk to intercept the outer sapwood. Injection holes should not exceed $2 \cdot 1/2$ inches (6.3 cm) in depth.

Use appropriate trunk-injection equipment capable of injection pressures from 50 to 100 gsi

PRECAUTIONS

- Do not treat sugar maple trees or any other trees that are or could be tapped for sugar within one year
- Do not treat nut or fruit trees that will be harvested within one year after application
- Do not apply to trees which show visible symptoms of severe stress
- Apply at the recommended rate follow safety procedures
- Avoid injections at excessive pressures

In case of emergency involving this product Call Collect day or night (314) 694-4000

Add species listed on following page.

Change to:

Eucalyptus spp.

6 7

75 to 100 100

Tree Species	Injector Spacing (inches)	Volume/ hole (ml)
Northern Pin Oak	811	50 to 75
Northern Red Oak	8"	50 to 75
White Oak	8"	50 to 75
Boxelder	6"	20 to 40
Hackberry	6 "	40 to 60
Little-leaf Linden	6 ¹¹	20 to 30
American Basswood	6"	40 to 60
Mulberry	6 "	75 to 100
Rusty-leaf Fig	8"	30 to 50
'Crimson King' Morway Maple	6"	10 to 20
Slippery Elm	8"	40 to 60
Honey Locust	6"	40 to 60