34704-692

10/10/2008



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

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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Mr. John T. Tice Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286

OCT 1 0 2008

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Registrant:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated September 8, 2008 for:

# EPA Registration 34704-692

# Prometryne 4L Herbicide

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and 98-10 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on <u>nonrefillable</u> containers. The code may appear either on the label (and can be added by nonnotification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Banza Djapao of my staff at 703-305-7269.

Sincerely,

Linda Arrington Notifications & Minor Formulations Team Leader Registration Division (7505P) Office of Pesticide Programs

Please read instructions on re	everse before compl	The form,	For	n Approved	MB No. 207	0-0060. Ar	Z/S proval expires 2-28-9
€PA	Environmenta	united States I <b>Protectio</b> ngton, DC 2046			Registratic Amendme Other		dentifier Number
		Application	n for Pesticide -	Section	1	· · · · · · · · · · · · · · · · · · ·	
1. Company/Product Number 34704-692			2. EPA Product Jim Tompkir			3. Propose	d Classification
4. Company/Product (Name) Prometryne 4L Herbicid	le		<b>РМ#</b> 25				
5. Name and Address of App Loveland Products, In P.O. Box 1286 Greeley, Colorado 800	c.	ode)	(b)(i), my proc to:	Juct is sim		ic equent	A Section 3(c)(3) A Section and labeling
· · · · · ·			Section - II				<u> </u>
Amendment - Explain Resubmission in response Notification - Explain I Explanation: Use addition Notification to change 1. Material This Product Will Child-Resistant Packaging Yes Ves No Certification must be submitted 3. Location of Net Contents I Ves Label Critication I Contents I	onse to Agency letter below. al page(s) if necessar ge the disposal Be Packaged In: Unit Packaging ↓ Yes ↓ No If "Yes" Unit Packaging wgt. nformation ontainer	y. (For section language i	Agend "Me T "Me T Other I and Section II.) n accordance with Section - III Water Soluble Packagir Yes Ves No If "Yes" No. Package wgt con il Container 2.5 gal aph	per tainer	etion. elow. 007-4. 2. Type of Cor	nteiner letal lastic lass aper ther (Specify Directions Doklet	
			Section - IV	•			
1. Contact Point <i>(Complete )</i>	items directly below 1	for identification	·····	cted, if nec	essary, to proce	ss this applic	ation.)
Name	n.Tice@uap.com		ritle Manager Registratior		Tel		(Include Area Code)
	y knowlinglly false or		ion Il attachments thereto ar ement may be punishable			te. R	ate Application sceived (Stamped)
2. Signature John J.	ine	3	. Title Manager Registrait John.Tice@uap.co				· · · · · · · · · · · · · · · · · · ·
4. Typed Name John T.	Tice	5	. Dete Septemb	oer 8, 20	008		,

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete.

Yellow - Applicant Copy

Loveland	
PRODUCTS INC.	

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UCTS INC.		•	

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September 8, 2008

U. S. Environmental Protection Agency Document Processing Desk (NOTIF) OPP, Registration Division (7504-P) 2777 S. Crystal Drive Arlington, VA 22202

Subject: Notification for Prometryne 4L Herbicide, EPA Reg. No. 34704-692.

Dear Linda Arrington,

This letter transmits an application for a Notification for the product listed above. This notification changes the disposal language in accordance with PRN 2007-4. Included in this action are:

- 1. EPA FORM 8570-1
- 2. TWO COPIES OF THE LABEL SUITABLE FOR POSTING.

This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

If you have any questions, please feel free to contact me by email at JOHN.TICE@UAP.COM or call 970-347-1484.

Sincerely,

John T. Tice Manager Registrations Loveland Products, Inc.

Enclosures



# PROMETRYNE **4L HERBICIDE**

# FOR SELECTIVE WEED CONTROL IN COTTON. CELERY, PARSLEY AND DILL.

ACTIVE INGREDIENT:

Prometryn: 2,4-bis (isopropylamino)-6-(methylthio)-s-triazine

INERT INGRÉDIENTS: .....

<u>. 55.6%</u> 100.0%

TOTAL PROMETRYNE 4L contains 4 lbs. active per gallon

# KEEP OUT OF REACH OF CHILDREN CAUTION

# EPA REG. NO. 34704-692 EPA EST. NO. 34704-NB-2 NET CONTENTS 2½ GALS. (9.46 L)

Provi® trademark of American Cyanamid for pendimethalin Trefian® trademark of Dow Elanco X-77® trademark of Chevron Chemical Co. Tronic® is a Registered T.M. of Kalo, Inc. Triton® is a Registered T.M.

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# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Remove contaminated clothing and wash clothing before reuse. Harmful if absorbed through skin. Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes, or clothing.

# **FIRST AID**

If Inhaled:	
	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin	<ul> <li>Take off contaminated clothing.</li> </ul>
or clothing:	Rinse skin immediately with plenty of water for 15-20     minutes.
	Call a poison control center or doctor for treatment advice.
	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:

1-800-301-7976.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### **Personal Protective Equipment:**

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical resistant gloves such as nitrile or butyl, shoes plus socks. In addition, mixers and loaders supporting aerial applications must wear a chemical-resistant apron and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N,R, P, or HE filter.

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 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:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with 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**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

### **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. 

AGRICULI URAL 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 green-	
houses, and handlers of agricultural pesticides. It contains requirements for	
training, decontamination, notification, and emergency assistance. It also con-	
tains 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 onter or plique worker entry into treated ereas during the restricted entry	

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours for celery and 12 hours for all other crops. 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 over long-sleeved shirt and long pants and chemical-resistant gloves such as nitrile or butyl and shoes plus socks

## Shake well before using.

# PROMETRY 4L EPA REG. NO. 34704-692

#### For agricultural or commercial use only. Not for use by homeowners.

#### CHEMIGATION:

Refer to supplemental labeling entitled "APPLICATION THROUGH IRRIGATION SYSTEMS CHEMIGATION" for use directions for chemigation. Do not apply this product through any irrigation systems unless the supplemental labeling on chemigation is followed.

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 regarding spraying.

The distance of the outermost nozzles on the boom must not exceed ¾ of the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

#### INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest 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.

- 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 the recommended practice. Significant deflection from 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.

#### **APPLICATION HEIGHT**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### SWATH ADJUSTMENT

When applications are made with a cross wind, 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 aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### WIND

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 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.

#### 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 a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud 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 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.

# SENSITIVE AREAS

The pesticide should only  $b_{e} \rightarrow \rho$  pied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas.)

PROMETRYNE 4L is a selective herbicide that may be applied either before or after weeds emerge for control of most annual broadleaf weeds and grasses, including groundcherry, lambsquarters, annual morningglory, malva, mustard, black nightshade, pigweed (carelessweed), purslane, Florida pusley, ragweed, smartweed, teaweed (prickly sida), barnyardgrass (watergrass), crabgrass, foxtail, goosegrass, junglerice, *Panicum* spp., signalgrass (and other *Brachiaria* spp.), and wild oats. PROMETRYNE 4L also controls shallow-germinating seedlings of cocklebur, coffeeweed, and sandbur. It does not control johnsongrass, bermudagrass, other established perennials, or sprangletop at selective rates.

When applied before weeds emerge, PROMETRYNE 4L enters weeds through their roots. Thus, its effectiveness depends on moisture to move it into the soil. Under very dry soil conditions after application, a shallow cultivation or rotary hoeing will generally result in better weed control.

When applied to emerged weeds, PROMETRYNE 4L provides foliar knockdown and/or residual control of later germinating weeds, depending on the rate applied.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, we recommend the use of this product in combination with other registered herbicides which are not triazines. Consult with your State Agricultural Extension Service for specific recommendations.

#### FAILURE TO FOLLOW DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PERFORMANCE, AND/OR ILLEGAL RESIDUES.

#### Equipment and Mixing

Thoroughly clean sprayer prior to use. Do not use a sprayer contaminated with 2,4-D or other materials, as crop damage or sprayer clogging may result.

Use conventional spray equipment with hydraulic or mechanical agitation. Screens in nozzles and in suction and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to maintain 35-40 psi at the nozzles, and provide sufficient agitation in tank to keep mixture in suspension. A centrifugal pump which provides propeller shear action is recommended for dispersing and mixing this product. Spray solution should be bypassed through a correctly positioned sparger tube or iets.

**Nozzles:** For preplant incorporated or preemergence application, use flat fan nozzle tips. For postemergence band application, use off-center nozzle tips. For postemergence broadcast application, use flat fan or off-center nozzle tips. Use flood nozzle tips only in Arizona and California for lay-by treatment in cotton at least 18 inches tall.

Mixing: (1) Fill spray tank ½ to ¾ full with clean water. (2) Start agitation. (3) Pour the product directly from the container into the spray tank partially filled with water, and then add the rest of the water. (4) Provide agitation during mixing and application to maintain a uniform suspension.

Cleaning: Wash sprayer thoroughly with clean water immediately after use. Do not use the same sprayer on sensitive crops, as even small residues of PROME-TRYNE 4L in the tank may cause injury to these crops.

#### Ground Application (All uses):

Use conventional ground sprayer equipped with nozzles that provide accurate and uniform application.

Calibrate sprayer before use. Unless otherwise specified, use a minimum of 20 gals. of spray mixture per acre for all preplant incorporated, preemergence, and postemergence applications with ground equipment.

#### Aerial Application (Cotton only):

Use aerial application only where broadcast applications are specified. Use a minimum of 5 gals, of spray mixture per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where sprav drift may occur. To assure that spray will be controllable within the target area when used according to the label directions, make applications at a maximum height of 10 ft, above vegetation, using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget origins, apply this product a minimum upwind distance of 400  $\Omega/3/20$ , assure that apply this product at minimum upwind distance of 400  $\Omega/3/20$ , assure that a minimum upwind distance of 400  $\Omega/3/20$ .

#### Seedbed Preparation

To insure proper placement of PROME FACINE 4L, seedbed is unust be well prepared and as free as possible from trach and clods. A firm seedbed is best for obtaining effective weed control. Uniformity in height and width of seedbed is essential for proper postemergence applications of PROMETRYNE 4L. Beds should be low and flat. Take care to avoid planter marks. Wide planter packing wheels or rollers are recommended. Wheel furrows should be uniform in depth. Mount the sprayer so that it follows the same rows as the planter.

# PROMETRY 4L. EPA REG. NO. 34/04-692

#### **Band Treatment**

For band treatment, calculate the amount of PROMETRYNE 4L needed by the formula:

### COTTON

PROMETRYNE 4L may be applied preplant incorporated or preemergence and/or postemergence as recommended in the following tables. The postemergence applications may follow preplant incorporated or preemergence treatments of PROMETRYNE 4L.

Do not use on glandless cotton varieties or crop injury will occur.

Note: Do not feed treated forage to livestock, or graze treated areas.

Preplant Incorporation (Arizona, California, and New Mexico)

Apply PROMETRYNE 4L at the appropriate rate in Table 1 as a broadcast or band treatment. If broadcast, treat the flat soil surface prior to listing. If banded, apply over partially finished or finished beds. Incorporate up to 4 inches deep immediately after application with PTO-driven equipment, double disk, rolling cultivator, or bed conditioner.

#### Table 1: Preplant Incorporation

Region	Soll texture	Broadcast rate per acre
Arizona, California, and	sand, loamy sand	Do not use
New Mexico	sandy loam (AZ & CA only	2.4-3.2 pts.
	sandy loam, loams (NM only)	3.2 pts.
	silt loam, clay	4.8 pts.

Precautions: Do not use PROMETRYNE 4L in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the beds is likely to occur or crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established. In New Mexico, apply either preplant incorporated or preemergence (not both) see Preemergence section.

#### Preemergence

Apply at planting or shortly after planting at the appropriate rate in Table 2. PROM-ETRYNE 4L may be used on cotton planted flat, on beds, or in furrows. To avoid concentration of PROMETRYNE 4L in the seed furrow, do not make broadcast applications to cotton planted in furrows deeper than 2 inches. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow. If banded, do not cover treated bands with soil while cultivating untreated row middles. Do not use on sand or loarny sand, on shallow soils with caliche subsoils, or in areas with caliche outcroppings.

Cotton may be replanted in soil previously treated with PROMETRYNE 4L. Do not apply a second preemergence application of PROMETRYNE 4L or injury may occur.

#### Table 2: Preemergence

Region	Soil texture	Broadcast rate per acre
Mid-South and Southeast	sandy loam	3.2-4 pts.
other than Mississippi	silt and clay loam	4.8 pts.
River Delta in Mississippi	Sharkey clay (Arkansas only)	5.6 pts.
Mississippi River	sandy loam	4-4.8 pts.
Delta in Mississippi	silt and clay loam	5.6 pts.
	Sharkey clay	Do not use

Region	Soil texture	Broadcast rate per acre
Blacklands of Texas and	loam	2.4 pts.
Okla., Texas Gulf Coast, and Texas Coastal Bend	clay	4.8 pts.
Rio Grande Valley of	loam	3.2 pts
Texas*	clay	4.8 pts.
High Plains, Rolling	sand, loamy sand	Do not use
Plains and Edwards	sandy loam	1.6 pts.
Plateau of Texas,	loam, sandy clay loam	2.4 pts.
Southwest Texas and New Mexico**	other clay soils	3.2 pts.
Arizona and California	Dor	lot use

\*RIo Grande Valley of Texas—Furrow irrigation cotton If adequate rain does not fall soon after application, a shallow cultivation will insure good weed control.

\*\*New Mexico—Apply either preplant incorporated or preemergence—(not both) See Preplant Incorporation section. Winter And Early Spring Control In AL, AR, LA, MO, MS, and TN For control of winter and eà., spring germinating annual weeds (including henbit, common chickweed, sibara, and Palmer amaranth), apply 1.5-2 pts. of PROMETRYNE 4L after bedding (e.g., stale seedbed) from November 1 until 30 days before planting cotton. Use the high rate for early applications and the low rate for applications nearer to cotton planting. Applications may be made before or after weeds emerge. For control of emerged weeds preferably less than 2 inches in height, add a suitable and approved crop oil concentrate or surfactant according to its label. In the event weeds exceed 2 inches in height at the time of treatment, apply PROMETRYNE 4L in tank mixture with a contact herbicide (e.g., Gramoxone® Extra or Roundup®). Refer to the label of the contact herbicide for rates of application, additives and for weed height restrictions at time of application.

After applying PROMETRYNE 4L, do not mechanically till the seedbed prior to the cotton planting process, as this will encourage germination of weed seeds.

Follow with a preemergence herbicide program for cotton. In the event that a subsequent application of PROMETRYNE 4L is made, do not exceed the total rate of PROMETRYNE 4L that may be applied to a single cotton crop.

### Winter Weed Control in CA

For control of winter weeds on fall bedded cotton land, apply PROMETRYNE 4L after bedding either preemergence of posternergence to weeds less than 2 inches tall. Winter weeds controlled include:

chickweed	London rocket	redmaids
fiddleneck	mustards	sheperdspurse
filarees	pineappleweed	sowthistle, annual
marces	pilleappieweed	3040 II3(18, all 10a)

On sandy loam soil, apply 3.2 pts/A; on medium or fine soil, apply 4 pts/A. To avoid crop injury, do not use on sand or loamy sand. For postemergence weed control, add a suitable surfactant, such as X-77, at 0.5% of spray volume or an emulsifiable oil at 1.0% of spray volume. Rainfall or sprinkler irrigation is necessary to activate the preemergence activity of PROMETRYNE 4L.

After pre-irrigation and before planting in the spring, knock off the top ¼-½ of the seedbed. Then make a preplant application of PROMETRYNE 4L over the surface of the seedbed using a power-tiller, rolling cultivator, or similar implement that will provide uniform incorporation. Refer to Table 1 for preplant incorporation rates of PROMETRYNE 4L in CA. To avoid crop injury, do not cultivate treated soil back toward the cotton until after cotton emergence and just before the first irrigation.

Precaution: To avoid crop injury, do not use PROMETRYNE 4L for winter weed control in areas of excess salt or calcareous soil.

Note: To avoid illegal residues, do not use more than 10.3 pts. of PROMETRYNE 4L on sandy loam soil or 11.9 pts. of PROMETRYNE 4L on medium or fine soil per acre per year, including winter weed control, preplant incorporation, chemical hoe, and lay-by applications.

#### Winter Weed Control In Texas

For control of Winter weeds *only*, such as henbit (purpletop) and seedling dock on fall bedded cotton land in the Texas Gulf Coast and Blacklands of Texas, apply 1.2-1.6 pts. of PROMETRYNE 4L per acre in the Fall or Winter to land that will be planted to cotton the following Spring. For best results, apply before weeds emerge. PROMETRYNE 4L will give effective control of emerged henbit if applied before it reaches 4-6 inches tall. For postemergence henbit control, add a suitable surfactant, such as X-77<sup>®</sup>, at 0.5% of spray volume or an emulsifiable oil at 1.0% of spray volume to the spray tank.

#### Postemergence Directed

Be especially careful in applying PROMETRYNE 4L postemergence to prevent contact of the spray with cotton leaves, or injury may occur. Use precision application equipment so the spray is accurately directed to the base of the cotton plants and still thoroughly covers the soil and weeds beneath the cotton plants. Apply during calm periods to prevent drift. Use leaf lifters or shields if leaf contact cannot be avoided merely by directing the spray. Apply only when all plants have exceeded the minimum recommended height. Apply to level, well prepared surfaces such as relatively clod-free beds made with bed-shapers.

Do not apply to furrow-planted cotton until furrows are leveled (plowed in). Do not treat cotton under stress from drought, cultivator damage, or fertilizer application.

When applying to emerged weeds, add 2 qts. of surfactant per 100 gals. of spray mixture. Use a surfactant that is compatible with PROMETRYNE 4L when applied in cotton and is approved by EPA for use on food and feed crops. Examples include X-77, Tronic<sup>®</sup> and Triton<sup>®</sup>.

Chemical Hoe (Emerged Weeds only): Apply PROMETRYNE 4L at the appropriate rate in Table 3, two or three times if necessary. In cotton 3-6 inches tall, be extremely careful to avoid spray contact. with actton leaves by applying PROME-TRYNE 4L with a precision applicator equipped with fenders or shields such as Bell Row Shield, Dickey Fenders, or W&A Fenders. In cotton less than 10 inches tall, apply only if cotton is bed or flat-planted:

. . . .

#### PROMETRY **4**L EPA REG. NO. 34/04-692

Table 3: Chemical Hoe			
Height of cotton	Height of	Broadcast	
and area of use	weeds	rate per acre	
3 to 6 inches	Less than 1 inch	1 pt.	
(Arkansas,			
Louisiana,			
Mississippi,			
Missouri,			
Tennessee, and			
Texas)			
6 or more inches (all regions)	Less than 2 inches	1-1.3 pts.	

Lav-by (Emerged Weeds and Germinating Weeds); Apply PROMETRYNE 4L at the appropriate rate in Table 4, once per season when cotton is at least 12 inches tall (18 inches where flood nozzles are used in Arizona and California). Apply before weeds are 2 inches tall.

#### Table 4: Lay-by

		Broadcast
Region	Soil texture	rate per acre
Mid-South and	sandy	2.4 pts.
Southeast	loam	2.8 pts.
	clay	3.2 pts.
Blacklands of Texas	loam	1.6 pts.
and Oklahoma	clay	3.2 pts.
High Plains of Texas	sandy	1.6 pts.
and New Mexico	loam and clay	2.4 pts.
Southwest Texas	loam	2.4 pts.
· .	clay	3.2 pts.
Rio Grande Valley _ of Texas	Do no	t use
Arizona and California	sand and	Do not use
	loarny sand	
(Do not use in the	sandy loam	2.4-3.2 pts.
Coachella Valley)	loam	3.2 pts.

#### **Rotational Crops**

The following vegetable and cover crops may be planted in the Fall when PROM-ETRYNE 4L was applied on cotton by no more than one of these methods that year; preplant incorporated, preemergence, or only one chemical hoe treatment.

#### Vegetables

Cabbage, okra, peas, sweet corn

Cover Crops (must be plowed down and not used for food or feed) Oats, sorghum, Winter barley, Winter rye, Winter wheat

Onions and red beets may not be planted within eight months of applying PROMETRYNE 4L.

Spring-seeded crops in California and Arizona and Spring-seeded vegetables in the Rio Grande Valley of Texas should not be planted until after April 1.

### PROMETRYNE 4L Combinations for Cotton

Prowl® (Arizona, California, New Mexico, and the upper and lower El Paso Valley of Texas)

This preplant incorporated tank mixture controls all weeds listed on this label and on the Prowl cotton label. Apply prior to listing or over partially finished or finished beds and incorporate immediately. Refer to the Prowl label for specific mixing, spraying, and incorporation methods. Continuous agitation in the spray tank is required to keep the material in suspension. Apply the tank mixture with ground

equipment in at least 10 gals. of water per acre, or by air in at least 5 gals. of water per acre, at the appropriate rates from Table 5.

#### Table 5: Tank Mixture with Prowl

	Broadcast rate per acre	
Soli texture	Prowl	PROMETRYNE 4L
sand, loarny sand	Do not use	
sandy loam	1-1.5 pts.	2.4-3.2 pts.
loam	1.5-2 pts.	3.2 pts.
silt loam, silt, sandy clay loam	1.5-2 pts.	3.2-4.8 pts.
clay loam, silty clay loam, clay	1.5-3 pts.	3.2-4.8 pts.

Use the high rate for each soil texture above if heavy weed populations are anticipated. Use the 3 pt. rate of Prowl for heavy clay soils.

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the bed is likely to occur as crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. Do not use this tank mixture when cotton is irrigated up as crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established.

Note: Do not feed treated forage to livestock, or graze treated areas. Rotational Crops: If freated crop is lost, cotton may be replanted. Do not rework the soil. Refer to the Cotton section of this label for rotational crop restrictions. Trifiuralin Tank Mixture (Arizona, California, New Mexico and the upper and lower El Paso Valley of Texas)

Any EPA registered 4 to 5 tank mix

er gallon Trifluralin product may be used for this 7/8

This combination controls weeds listed on this label and on the Trifluralin label. This combination also controls shallow-germinating seedlings of cocklebur and coffeeweed

Follow procedures on the Trifluralin label for soil preparation and incorporation. Apply the tank mix combination to the flat soil before disking.

Pour PROMETRYNE 4L directly into spray tank one-half to three-fourths full of water, allow it to disperse with agitation, add Trifluralin, and then add the rest of the water. Continuous agitation in the spray tank is required to keep the material in suspension. Apply the tank mixture in at least 20 gals. of water per acre, or by air in at least 5 gals. of water per acre, at the appropriate rates from Table 6.

### Table 6: Tank Mixture with Trifluralin

Soil texture	Broadcast rate per acre		
	Trifluralin	PROMETRYNE 4L	
sand, loamy sand	Do not use		
sandy loam	1 pts.	2.4-3.2 pts.*	
medium soils	1 1/2 pts.	4 pts.	
fine soils	2 pts.	4 pts.	
muck or peat	Do not use		
*Use less than 3.2 pts. pe	er acre only in Arizona and	d California.	

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the bed is likely to occur or crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established.

Note: Do not feed treated forage to livestock, or graze treated areas.

Rotational Crops: Cabbage, celery, okra, and peas may be planted in the fall after a Spring application of Trifluralin + Prometryn. Winter barley, rye and wheat can be planted in the Fall if they are plowed down and not used for food or feed. Onions and red beets may not be planted within eight months of applying PROMETRYNE 4L. Refer to the Triffuralin label for other directions and precautions.

#### Trifluralin Split Application (Arizona and California)

Apply a preplant incorporated application of Trifluralin as directed on that label, except use the appropriate rate from Table 6. Do not apply Trifluralin before January 1. Follow at planting or just before planting with a preplant incorporated treatment of PROMETRYNE 4L as directed in the Cotton section of this label, except use the appropriate rate from Table 6.

### DSMA or MSMA

For faster knockdown of the weeds controlled by PROMETRYNE 4L alone, apply 1-1.3 pts. of PROMETRYNE 4L plus 3 lbs. active ingredient of DSMA or 2 lbs. active ingredient of MSMA per acre, following the same directions, precautions, and limitations as given on this label for PROMETRYNE 4L applied alone poste-mergence directed (chemical hoe.) If needed, make a second application 1-3 weeks after the first application. Do not apply after first bloom.

Several formulations of DSMA and MSMA are available under various trade names from several manufacturers. Observe the directions, limitations, and precautions on the label of the product used.

#### CELERY Seedbeds (Florida)

Broadcast 1.2-1.6 pts. in a minimum of 20 gals. of water per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply only after seedbed covers have been removed from seedbeds for at least one week. Apply only once per year to seedbeds.

#### Direct-seeded Celery (California only)

Apply PROMETRYNE 4L at rates given below in a minimum of 20 gals. of water per acre. Within the rate ranges given, use the lower rates on coarse-textured soils and soils low in organic matter; use the higher rates on fine-textured soils and soils high in organic matter.

Preemergence: Broadcast 2.4-3.2 pts. per acre at planting or shortly after planting before celery emerges.

Postemergence: Broadcast 1.6-2 pts. per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply before weeds are 2 inches tall.

To Avoid Injury to Direct-seeded Celery: (1) Make either One preemergence or one postemergence application (not both) per celery crop. (2) Do not use on sand or loamy sand. (3) Do not apply if celery is under water stess. (4) Do not apply postemergence treatments of PPOMETRYNE 4L with other pesticides. Apply only after foliar applications of other pesticides are dry. (5) Po not apply within two weeks after an application of a herbicidal oil, such as carrot" oil

#### Single Pre-Transplant Application

Apply one application at the appropriate rate from table 7 in a minimum of 20 gallons of water. Make the application up to 21 days prior to transplanting. Make the application to a weed-free bed and do not disturb the treated area between application and transplanting. Note: A post-transplant application will not be allowed if the pre-transplant application was made at the maximum allowable use rate (see table 7).

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Split Pre-Transplant and Post Transplant Application

Make the application at the appropriate rate from table 7 in a minimum of 20 gallons of water.

Make the pre-transplant application up to 21 days prior to transplanting. Make the application to a weed-free bed and do not disturb the treated area between application and transplanting. A second application may be made during the 2 to 6 week period after transplanting and before weeds are two inches tall. The total amount of PROMETRYNE 4 L applied to the crop (pre-transplant plus post-transplant applications) cannot exceed the maximum allowable use rate (see table 7).

### Post Transplant Application

Apply one application at the appropriate rate from Table 7 in a minimum of 20 gals. of water per acre during the 2-6 week period after transplanting. Within the rate ranges given, use the lower rate on relatively coarse-textured soils and soils low in organic matter; use the higher rate on relatively fine-textured soils and soils high in organic matter. Application may be made over the celery. Apply before weeds are 2 inches tall.

### Table 7: Transplanted Celery

Soil	Broadcast rate per acre
sandy or muck	1.6-3.2 pts.
coarse-textured	2-3.2 pts.
fine-textured	3.2-4 pts.
coarse-textured	3.2-4.8 pts.
fine-textured	4.8-6.4 pts.
fine-textured or muck	2-4 pts.
fine-textured	3.2-4 pts.
	sandy or muck coarse-textured fine-textured coarse-textured fine-textured fine-textured or muck

#### **Rotational Crops**

The following crops may be seeded 5 months after applying no more than 4 pts. PROMETRYNE 4L per acre on celery: Cabbage, celery, corn, and peas. Onions and red beets may not be planted within eight months of applying PROMETRYNE 4L.

### DILL (CALIFORNIA ONLY)

Apply one preemergence or one postemergence application at the rate of 3.2 pints per acre in a minimum of 20 gallons of water per acre. Postemergence application must be made before weeds are two inches tall. Do not harvest within 48 days of application.

# To Avoid Injury to Dilt.

(1) Make either one preemergence or one postemergence application (not both) per dill crop. (2) Use on sand or loamy sand may cause crop injury. (3) Do not apply if dill is under water stress. (4) Do not apply preemergence treatment of PROMETRYNE 4L with other pesticides. Apply only after foliar application of other pesticides are dry. (5) Do not apply within two weeks after an application of a herbicidal oil.

Rotational crops: The following crops may be seeded 5 months after applying PROMETRYNE 4L on dill: cabbage, celery, corn, cotton, and peas. Onions and red beets may not be planted within eight months of applying PROMETRYNE0 4L.

#### PARSLEY-FOR USE IN CALIFORNIA ONLY

For control of cheeseweed, burning nettle and shepherd's purse, apply by ground, 1-2 quarts of product per acre (or 1-2 pounds ai/acre) in a minimum of 30 gallons of water per acre. Use the lower rate on coarse texture soils and soils low in organic matter. Use the higher rate on fine texture soils and soils high in organic matter.

### To Avoid Injury to Parsley:

(1) Make one preemergence application per parsley crop. (2) Do not use on sand or loamy sand soil. (3) Do not apply if parsley is under water stress. (4) Do not apply within two weeks after an application of a herbicidal oil, such as "carrot" oil.

Preemergence: Apply as a single application following planting, before parsley emerges. Do not enter treated areas until spray residues have dried. Do not apply within 84 days of harvest.

# STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Do not store under conditions which might adversely affect the container or its ability to function properly. Such conditions include, but are not limited to, positioning of the container in storage, storage temperature, potential for crushing or damage due to stacking, and penetration of moisture. **STORAGE:** Store in a safe manner. Store in original container only. Store in

STORAGE: Store in a safe manner. Store in original container only. Store in cool, dry place. Reduce stacking height where local conditions, such as humidity or pallet overhang can affect package strength. PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper dis-

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. 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 at the nearest EPA Regional Office for guidance. **CONTAINER DISPOSAL: Nonrefillable container**. Do not reuse this

### Storage & Disposal col.

container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ tull with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVE-LAND PRODUCTS, INC. or the seller is authorized to vary in any way.

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