

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511P)

1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg.	Number:
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Date of Issuance:

34704-1125

2/14/2019

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Unconditional

Name of Pesticide Product:

LPI 6538

Name and Address of Registrant (include ZIP Code):

Loveland Products Inc. P.O. Box 1286 Greeley, CO 80632-1286

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
- 2. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 34704-1125."

Signature of Approving Official:

Date:

2/14/2019

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

Basic CSF dated 11/29/2018

Any CSFs other than those listed above are superseded.

If you have any questions, please contact Alex Horansky name of my branch by phone at (703) 347-0128 or via email at Horansky.alex@epa.gov.

Sincerely,

Andrew Bryceland, Team Leader Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

Enclosure

ACCEPTED

02/14/2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 0.470.4.440.5

34704-1125

LPI 6538

[Alternate Brand Name: ENDURANCE]

A plant growth regulator for improving photosynthetic efficiency, enhancing metabolic activity and increasing tolerance to abiotic stress of listed commodities

FOR AGRICULTURAL USE ONLY

ACT	IVE INGREDIENTS:	By Wt.
Cho	line Chloride:	6.00%
Gan	nma Aminobutyric Acid (GABA):	5.00%
OTH	IER INGREDIENTS:	<u>89.00%</u>
TOT	AL:	100.00%

KEEP OUT OF REACH OF CHILDREN CAUTION

See (back) (side) panel for additional Precautionary Statements and Directions for Use

	FIRST AID								
If in eyes:	If in eyes: • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.								
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing								
	eye.								
	 Call a poison control center or doctor for treatment advice. 								
	HOTLINE								
Have the p	roduct container or label with you when calling a poison control center or doctor, or								
going for treatment. For non-emergency information concerning this product, call the National									
Pesticides Ir	nformation Center (NPIC) at 1-800-858-7378 (NPIC Web site: <u>www.npic.orst.edu</u>).								

For a medical emergency involving this product call Nutrien at 1-866-944-8565 (24 hours; 7 days)

EPA Reg. No. 34704-

EPA EST. No. 90866-CA-001

NET CONTENTS: 2.5 Gallons (9.642 L)

[EXP 11/18 Print Code to be placed here]

FORMULATED FOR: LOVELAND PRODUCTS, INC. P.O. BOX 1286 GREELEY, COLORADO 80632-1286

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

- User should wash hands before eating drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. 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 highwater mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

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 State or Tribal 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), notification to workers, and restricted-entry interval. The requirements in this box 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 4 hours.

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, socks, shoes, chemical resistant gloves.

PRODUCT INFORMATION

LPI 6538 is a plant growth regulator which facilitates foliar and reproductive growth of crops. LPI 6538 improves plant health by improving the capture of photosynthetic energy, increasing metabolic activity, and preserving cell membrane integrity.

LPI 6538 may be used in routine applications, or as needed to improve tolerance to temperature extremes and other abiotic stressors.

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Application Rates

Optimum product efficacy is dependent on product concentration in the spray solution. Application rates are based on a 0.5% concentration target.

Mix the specified amount of LPI 6538 in water to create a 0.35 - 0.65% solution and apply with sufficient volume for uniform and thorough coverage of foliage and/or fruit. Refer to the specific mixing rates in the table below.

Range Gal/A (Gallons Per Acre)	Gal/A (Gallons Per Acre)	0.5% Rate	Use Rate	12 oz	24 oz	36 oz
	15	9.6		0.63%		
0-25	20	12.8	12 oz	0.47%		
	25	16.0		0.38%		
	30	19.2			0.63%	
26-50	35	22.4	24 oz		0.54%	
	40	25.6			0.47%	
	45	28.8			0.42%	
	50	32.0			0.38%	
	60	38.4				0.47%
51-75	70	44.8	36 oz			0.40%
	75	48.0				0.38%
	80	40.96				
Over 75	100	51.2	0.4% v/v			
	150	76.8	U.470 V/V			
	200	102.4				

CROPS

APPLICATION INSTRUCTIONS				
Crop	Application Timing			
Berry and Small Fruit including Blackberry, Blueberry, Caneberry, Kiwi and Raspberry.	1st application: From leaf out until full bloom			
See instructions and rates for Grape and Strawberry below.	Repeat application at 10- to 14-day interval as conditions dictate			
	Foliar application: Apply to achieve full coverage			
Brassica Vegetables including Broccoli, Cabbage,	1st application: At 2- to 4- true leaf stage			
Cauliflower and Mustard greens	Repeat application at 10- to 14-day interval as conditions dictate			
	Foliar application: Apply to achieve full coverage			
Bulb Vegetables including Garlic, Leek, Onion	1st application: At 2- to 4- true leaf stage			
	Repeat application at 10- to 14-day interval as conditions dictate			
Corn ⁽¹⁾⁽²⁾ (field pop, sweet)	1st application: From 10 leaves up until full tassel			
Contract (neta pop, sweet)	Second application may be made 14 days later			
Citrus Fruit including Grapefruit, Lemon, Lime,	1st application: At 10% to full bloom			
Sweet Orange and Tangerine	May repeat application at 10 to 14-day interval as conditions dictate			
	1st application: Pin head square			
Cotton, acala, pima, and short staple varieties	May repeat application at 10- to 14-day interval as conditions dictate			
Cucurbit Vegetables including Cantaloupe,	1st application: Just prior to first bloom			
Cucumber, Honeydew, Muskmelon, Squash (summer and winter) and Watermelon	May repeat application at 10- to 14-day interval as conditions dictate			
	1st application: Just prior to first bloom			
Fruiting vegetables, such as Tomato, Eggplant, and Pepper	May repeat application at 10- to 14-day interval as conditions dictate			
	1st application: At bud swell to full bloom			
Grape	Repeat applications may be made at 10- to 14-day interval if conditions reoccur or temp exceeds 90 °F			

Non-Grass animal feed and hay such as: Alfalfa,	1st application: At 4 inches of new growth		
Clover, and Vetch	Repeat application between cuttings as needed.		
Herbs and Spices including Basil, Dill, Mustard	1st application: At 2- to 4- leaves		
and Sage	Repeat application may be made on 14-day interval as conditions dictate		
Leafy Vegetables including Celery, Head and Leaf	Apply after transplant recovery or early vegetative stage (direct seeded)		
Lettuce, Kale and Spinach	Repeat applications may be made at 10- to 14-day interval if conditions reoccur		
Legume Vegetables	1st application: At 10% bloom		
(succulent and dried) including Beans (all types), Peas, and Soybeans ⁽¹⁾⁽²⁾	May repeat application at 10- to 14-day interval as conditions dictate		
Oil seed crops including Canola ⁽¹⁾⁽²⁾ , Flax, and	1st application: Just prior to first bloom		
Sunflower	May repeat application 10 to 14 days later		
Peanut	1st application: At 2- to 4- leaves		
realiut	May repeat application 10- to 14 days later		
	1st application: From green-tip to full bloom		
Pome Fruits including Apple and Pear	Second application may be made 14 days later as conditions dictate		
Root and Tuber Vegetables including Carrot, Ginseng, Horseradish, Parsley (turnip-rooted),	1st application: From 4 leaves to tuber initiation		
Potato, Radish, Sugar Beet, Sweet Potato, Turnip	Second application may be made 10- to 14- days later as conditions dictate		
Small grains, such as barley, millet, oat, rice, rye,	1st application: At growth stage Feekes 3-4		
sorghum, and wheat	Repeat application at 10- to 14-day interval if needed		
Strawbarry	1st application: Apply after transplant recovery up to first bloom		
Strawberry	May repeat application at 10 to 14-day interval as conditions dictate		
Stone fruits, such as cherry, peach, nectarine,	1st application: From bud swell to full bloom		
apricot, and plum	May repeat application at 10 to 14-day interval as conditions dictate		

	1st application: From green bud to full bloom		
I Walliut, allu Decali	May repeat application at 10 to 14-day interval as conditions dictate		

⁽¹⁾ This product can be tank mixed with glyphosate products registered for use on Roundup Ready® crops.

PRE-TRANSPLANT

To reduce the effects of transplant shock, LPI 6538 can be applied 2 to 3 days pre-transplant to plants in a greenhouse flat, containers or pre-dug

PRE-TRANSPLANT APPLICATION INSTRUCTIONS								
Crop	Application Timing	Rate/ 1000 square feet	Water Volume/1000 sq ft					
Berries and Small Fruit								
Citrus Fruit								
Fruiting Vegetables								
Grapes								
Leafy Vegetables	2 to 3 days pre-transplant	0.25 to 0.5 fl oz	50.0 to 100 oz					
Pome Fruits								
Strawberry								
Stone Fruits								
Tree Nuts								

TURFGRASS

For Turfgrass: Apply LPI 6538 by ground spray according to the table below using 1.0 to 5.0 gallons of water per 1000 square feet. Use LPI 6538 for weather and compaction stressed turf growth at the dilution rate of 1:200 (6.4 fluid ounces product per 10.0 gallons water).

Turf	Amount (LPI 6538 /Gal Water/1000 Sq Ft*)	Application Directions and Timing		
Warm climate grasses				
including Bermuda,				
Bermuda hybrids,	0.64 to 3.2 fl oz/1.0 to 5.0	Make applications at 2-week intervals during the		
Centipede, St. Augustine	gal of water/1000 sq ft	growing season		
& similar warm season				
grasses				
Dichondra	0.64 to 3.2 fl oz/5.0 to 10.0	Make applications at 2-week intervals during the		
Dictionara	gal of water/1000 sq ft	growing season		
Cool Climate grasses				
including Bluegrass,	0.64 to 3.2 fl oz/1.0 to 5.0	Make applications at 2-week intervals during the		
Fescue, Rye, and similar	gal of water/1000 sq ft	growing season		
cool season grasses				

^{*}Apply 0.64 fluid ounce per gallon.

⁽²⁾ This product can be tank mixed with products registered for use on LibertyLink® crops.

GREENHOUSE AND NURSERY

Differences in responsiveness may vary from one cultivar to another or from one set of growing conditions to another. Unless previous experience dictates otherwise, prior to widespread use, test a small number of plants from each cultivar to verify desired efficacy. For plants that have become heat or cold stressed, follow the application rate and timing recommendation below in the following tables.

Foliar Plants

Aglaonema	Aphelandra	Dieffenbachia	Fittonia	Maranta	Philodendron	Schefflera	Syngonium
Ajuga	Caladium	Dracaena	Gynura	Palms	Pilea	Schlumbergera	Tradescantia
Anthurium	Cissus	Ficus	Hoya	Peperomia	Pothos	Spathiphyllum	Similar foliage plants

Application Rates and Timing: Dilute 6.4 fluid ounce of LPI 6538 in 10.0 gallons of water (1:200 dilution rate) when plants have at least 4 leaves. Repeat applications at 10- to 14-day intervals when required. Apply the last spray 1 to 2 weeks prior to sale. Uniform and thorough spray coverage is necessary for best results.

Bedding and Flowering Plants

Abutilon	Carnation	Coral Bells	Foxglove	Gladiolus	Lily	Osmachus	Salvia	Vinca
Aglais	Champaca	Cyclamen	Fuchsia	Gloxinia	Lupine	Petunia	Scabiosa	Zinnia
Alyssum	Chrysanthemum	Dahlia	Gardenia	Impatiens	Marigold	Poinsettia	Sedum	Similar
Calceolaria	Cineraria	Delphinium	Gazania	Iris	Michelia	Portulaca	Sempervivum	plants
Canna	Columbine	Dianthus	Geranium	Jasminum	Monarda	Roses	Tulips	

Application Rates and Timing: Dilute 6.4 fluid ounce of LPI 6538 in 10.0 gallons of water (1:200 dilution rate) when plants have at least 4 leaves. Repeat applications at 10- to 14-day intervals when required. Apply the last spray 1 to 2 weeks prior to sale. Uniform and thorough spray coverage is necessary for best results.

Woody Ornamentals

Arborvitae	Azalea	Carissa	English ivy	Juniper	Pine	Rhododendron	- Similar plants
Aucuba	Boxwood	Chinese magnolia	Holly	Maple	Podocarpus	Viburnum	

Application Rates and Timing: Dilute 6.4 fluid ounce of LPI 6538 in 10.0 gallons of water (1:200 dilution rate) when plants have at least 4 leaves. Repeat applications at 10 to 14-day intervals when required. Apply the last spray 1 to 2 weeks prior to sale. Uniform and thorough spray coverage is necessary for best results.

Tree Fruits (Not for Residential Use)

Apple	Cherry	Grape	Lemon	Mango	Persimmon	Starfruit
Asian pear	Fig	Jujubee	Litchi	Orange	Plum	Similar plants
Apricot	Guava	Kumquat	Longara	Peach	Prunes	

Application Rates and Timing: Dilute 6.4 fluid ounce of LPI 6538 in 10.0 gallons of water (1:200 dilution rate) when plants have leafed out. Repeat applications at 10 to 14-day intervals when required. Apply the last spray 1 to 2 weeks prior to sale. Uniform and thorough spray coverage is necessary for best results.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Non-refillable container. Do not reuse or refill this container.

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 full 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. Then offer for recycling if available 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.

For chemical spill, leak, fire or exposure, call CHEMTREC at 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 LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR

USER OF THIS PRODUCT FOR ANY CONSEQUENTIA THE NATURE OF A PENALTY.	L, SPECIAL,	OR INDIRECT	DAMAGES,	OR DAMAGES IN