Please read instructions on reverse before completing form.	-1/2/97 Form		13 854-4 P9 169 1070-0060. Approvel expires 05-31-98		
SEPA Environmental Protection Washington, DC 204	on Agency	Registra Amend X Other	ation OPP Identifier Number Notification		
Application	on for Pesticide - S	ection I			
1. Company/Product Number 43854-4	2. EPA Product Joanne	_	3. Proposed Classification		
4. Company/Product (Name) DIMENSION 107 Preemergence Weed Control w/Plan	PM# t Food PM:	23	None Restricted OPP ID# 245673		
5. Name and Address of Applicant (Include ZIP Code) Lange-Stegmann Company One Angelica Street St. Louis, MO 63147-3497	6. Expedited	uct is similar or iden	ance with FIFRA Section 3(c)(3) stical in composition and labeling		
Check if this is a new address	Product Nan	ne <u>N/A</u>			
	Section - II		,		
Amendment - Explain below. Resubmission in response to Agency letter dated X Notification - Explain below. Explanation: Use additional page(s) if necessary. (For section this Notification files an addit DIMENSION 107 Preemergence Weed	Agence "Me To Other -	me of "Lange	OTIFICATION		
	Section - III				
Material This Product Will Be Packaged in:					
Child-Resistant Packaging Yes* X No * Certification must Unit Packaging Yes X No If "Yes" Unit Packaging wgt. No. per Unit Packaging wgt.	Water Soluble Packagin Yes X No If "Yes" No.	X	f Container Motal Plastic Glass Paper Other (Specify)		
be submitted Unit Packaging wgt. container	Package wgt cont	.dilloi	Other (Specify)		
3. Location of Net Contents Information 4. Size(s) Re X Label Container 50 po	unds	5. Location of La X On Labo X On Lab			
6. Manner in Which Label is Affixed to Product X Paper X Stend	r glued	Other	and a second and a second and a second and		
Section - IV					
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Timothy J. Healey	Title Director o Regulatory		Telephone No. (Include Area Code) (314) 241-9531		
Certifical Certifical Certifical Certifical Certifical Certify that the statements I have made on this form and I acknowledge that any knowingly false or misleading state both under applicable law.	d all attachments thereto an				
2. Signature Timothy Mkaley	Regulator	of Safety & y Affairs	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Timothy J. Healey	5. Date December	18, 1996			

OFFICIAL NAME

DIMENSION® 107

PREEMERGENCE WEED CONTROL with PLANT FOOD

ADDITIONAL NAME

LANGE® TURF FORMULA DIMENSION® 107

PREEMERGENCE WEED CONTROL with PLANT FOOD

Dimension® 107 is a selective herbicide that provides control of listed annual grasses and broadleaf weeds in established lawns and ornamental turfs, including golf course fairways, roughs, and tee boxes. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

ACTIVE INGREDIENT:

NOTIFICATION

Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl) 5 5 dimethyl actor

(trifluoromethyl)-S,S-dimethyl ester... 0

0.107%

INERT INGREDIENTS:....

....... <u>99.893</u>% OTAL 100.00%

Product protected by U.S. Patent No. 4,692,184. Other patents pending. EPA Reg. No. 43854-4 EPA Est. No. 43854-MO-1

Read the entire label before using this product.

Use only according to label instructions. NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

C A U T I O N

FIRST AID: <u>IF IN EYES</u>- Immediately flush with plenty of water. Get medical attention if irritation persists.

IN INHALED- Remove individual to fresh air. Seek medical attention if breathing difficulty develops.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! CAUSES EYE IRRITATION. HARMFUL IF INHALED. Avoid contact with eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact while handling this material may cause allergic reaction in some individuals.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. In the State of New York do not use in Nassau County or Suffolk County.

GENERAL INFORMATION

This product is a selective herbicide that provides control of crabgrass and other annual grasses and broadleaf weeds in established lawns and ornamental turfs, including golf course fairways, roughs, and tee boxes. This product will not harm nearby established ornamentals when used according to label directions.

USE PRECAUTIONS

Turfgrass Safety

This product may be used on seeded, sodded, or sprigged lawns and ornamental turfs that are well established. The grass must have developed a good root system and a uniform stand, and have received at least two mowings following its seeding, sodding, or sprigging before it can receive its first application of this product. Use of this product on lawns and ornamental turfs that are not well established, or on those that have been weakened by weather-, pest-, disease-, chemical-, or mechanical- related stress, may increase the chances for turf injury.

	33333
FERTILIZER GUARANTEE	, , , , , , , , , , , , , , , , , , ,
Nitrogen (N)	Variable, %
Nitrogen (N). Available Phosphate (P_2O_5) . Soluble Potash (K_2O) .	Variable %
Soluble Potash (K ₂ O)	Variable %
This nitrogen material in this product has been coa	ted to ;
provide % coated slow release nitrogen (N). D	erived from
ammoniated phosphate, urea and muriate of potash.	

SPREADER SETTING					
Spreader	1.67 lbs.		product to 3.35 lbs.		
Cyclone Scotts	XXXX XXXX	XXXX XXXX	XXXX XXXX	XXXX XXXX	XXXX XXXX

This product should only be applied to lawns and ornamental turfs that are composed of the following turfgrass species that have been determined to be tolerant to applications of this product. When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product.

Cool-Season Grasses Common Name	Scientific Name	TURFGRASS REGIONS Northern States
Bentgrass, creeping*	Agrostis palustris	Transition States
Bluegrass, Kentucky	Poa pratensis	Southern States
Fescue, fine**	Festuca rubra	Coastal Southern
Fescue, tall	Festuca arundinacea	
Ryegrass, perennial	Lolium perenne	· · · · · · · · · · · · · · · · · · ·
Warm-Season Grasses Common Name Bahiagrass Bermudagrass	Scientific Name Paspalum notatum Cynodon dactylon	
Buffalograss***	_ Buchloe dactyloides	envigence (g. 1907), and the second control of the
Carpetgrass	Axonopus affinis	MAP
Centipedegrass	Eremochloa ophiuroides	of the US
Kikuyugrass	Pennisetum clandestinun	n
St. Augustinegrass	Stenotaphrum secundatu	m
Zoysiagrass	Zoysia, japonica	* * * * * * * * * * * * * * * * * * *

DO NOT apply this product to Colonial bentgrass (Agrostis tenuis) varieties.

*Use of this product on certain varieties of creeping bentgrass, such as 'Cohansey', 'Carmen', 'Seaside', and 'Washington' may result in undesirable turfgrass injury. Not all varieties of creeping bentgrass have been tested. **Use of this product on certain varieties of fine fescue may result in undesirable turf injury. The following fine 'rescue varieties have been found to be sensitive to this product; 'Atlanta', 'Banner', 'Beauty', 'Bilgart', 'CF-2', 'Enjoy', 'HF-93', 'Highlight', 'Ivalo', 'Jamestown', 'Köket', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Waldorf', and 'Waldina'. Not all varieties of fine fescue have been tested. ***DO NOT use this product on seedling buffalograss in the spring of the first year of establishment until the turfgrass is fully 'green and 'has established new roots.

RESEEDING, OVERSEEDING, OR SPRIGGING

Reseeding, overseeding, or sprigging of treated areas within 4 months after application of this product may inhibit the establishment of desirable turfgrasses. When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

GOLF COURSE PUTTING GREENS

DO NOT use this product on golf course putting greens.

OTHER USE PRECAUTIONS

The early postemergence crabgrass control described below is limited. Postemergence applications are only effective on crabgrass if applied before crabgrass has displayed its fifth leaf or first tiller.

For best results, cultural practices that disturb the soil, such as core-, spike-, or hydroaerification, and verticutting, should be done before application of this product. DO NOT apply this product until the grass has recovered from these cultural practices.

Apply this product directly to established lawns or ornamental turfs only. DO NOT apply to flowers, vegetables, shrubs, or trees. DO NOT use clippings from treated turf for mulching around vegetables or fruit trees. DO NOT apply this product to pastures. Keep people and pets off treated areas until dust has settled.

APPLICATION DIRECTIONS

Control of Crabgrass - Preemergence and Early Postemergence Control.

This product provides "preemergence" control of crabgrass (including the large, smooth, and southern species) when applied prior to the emergence of crabgrass from the ground in established lawns and ornamental turfs.

It can also provide "early postemergence" control of crabgrass during the early stages of crabgrass growth after the crabgrass has emerged from the ground. However, it is often difficult to see the very small, early stages of crabgrass in well-established lawns and ornamental turfs. Postemergence crabgrass control will be obtained only when this product is applied prior to the tillering of crabgrass, which generally corresponds to the time when you can first easily see the crabgrass plants in the lawn or turf. So the practical benefit of this product's additional, early postemergence activity is that (compared to strictly preemergence crabgrass products) it can give the user a 2.4 week longer period of time to make applications and still control crabgrass.

APPLICATION FREQUENCY AND TIMING

This product may be applied as a single application, as a split application, or as a sequential application for crabgrass control in the spring, summer, or fall.

DO NOT apply more than 10.72 pounds of this product per 1,000 sq. ft. per application, and no more than 32.16 pounds of this product per 1,000 sq. ft. per year.

SPRING APPLICATIONS

For single applications made in the spring or early summer, this product should be applied at the appropriate rate corresponding to one of the three control programs listed in Table 1 below, depending on the user's location, the turfgrass mowing height, and whether the use is considered to be preemergence or early postemergence at the time of the application. The duration of residual weed control provided by this product is directly related to the total rate applied, but will vary somewhat depending on weather, weed pressure, turfgrass competitiveness, and the user's location within a region.

<u>Use Program #1 for preemergence control at sites where the turfgrass is cut high (e.g., homeowner lawns).</u> This program provides 3-5 months of preemergence crabgrass control. This program should not be used for early postemergence crabgrass control.

<u>Use Program #2</u> for preemergence control at sites where (a) turfgrass is cut low (e.g., golf fairways), and (b) turfgrass maintenance or weed control has not been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control at sites where turfgrass is cut high (e.g., homeowner lawns).

<u>Use Program #3</u> for preemergence control at sites where (a) turfgrass is cut low (e.g., golf fairways) and (b) turf maintenance or weed control has not been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control at sites where turfgrass is cut low (e.g., golf fairways).

Subsequent sequential pre and/or postemergence applications should be made where longer periods of control are desired.

Where split fertilizer applications are recommended the rates in Table 1 may be split across two applications made 6-10 weeks apart and prior to crabgrass emergence.

<u>Table 1:</u> Recommended Single Application Use Rates* (Pounds of this product/1000 sq. ft.					
PROGRAM	#1	#2		#3	
USE (turfgrass cut) REGION	Preemergen (high-cut tu		Preemergence (low-cut turf) Postemergence (high-cut turf)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Preemergence (low-cut turf) Postemergence (low-cut turf)
North Transition South Coastal South	2.68 lbs./1000 sq. 3.86 lbs./1000 sq. 5.36 lbs./1000 sq. 7.93 lbs./1000 sq.	ft. 5.36 ft. 7.93	lbs./1000 sq. ft. lbs./1000 sq. ft. lbs./1000 sq. ft. lbs./1000 sq. ft.	7.53 10.72	lbs./1000 sq. ft. lbs./1000 sq. ft. lbs./1000 sq. ft. lbs./1000 sq. ft.**

*DO NOT apply more than 10.72 lbs. of this product/1000 sq. ft. per application, and no more than 32.16 pounds of this product/1000 sq. ft. per year. Postemergence control is limited; see "Control of Crabgrass" and "Use precautions" sections. Regions include areas listed below. See Map of United States.

North:	all other areas
Transition:	DE, KS, KY, MD, MO, NJ, VA, southeastern PA, southern areas
	of IL, IN, OH, & coastal areas of CT, NY, RI
South:	AL, AR, AZ, CA, GA, LA, MS, NC, NM, NV, OK, SC, TN, & TX
Coastal South:	HI, FL, & southern coastal areas of AL, GA, LA, MS, NC, SC,
•	<u>& TX</u>

^{**}May require split or sequential applications for full control.

FALL APPLICATIONS

This product can also be applied in the late summer or early fall (late August through November) at the "Program 3" use rates listed in Table 1 to provide control of crabgrass through the early part of the next spring. The fall application should be followed by an appropriate spring application to provide season-long control.

TIPS FOR IMPROVED CONTROL

For best results, apply this product within a few days after mowing and delay mowing again for a few days after the application. When treated lawn or ornamental turf areas are watered or receive significant rainfall within a few days after application of this product, improved weed control may result.

Use of split (half-rate) applications spaced 6-8 weeks apart may provide improved weed control.

CONTROL OF OTHER GRASS AND BROADLEAF WEEDS

Spring Applications. Used as directed for crabgrass control in the spring, this product will also control (at the "Program 3" rates) or suppress (at the "Program 2" rates) the following weeds when applied prior to their emergence:

barnyardgrass	goosegrass	_ lespedeza (common)
bluegrass (annual)	kikuyugrass	oxalis (buttercup, creeping
_		& yellow woodsorrel)
crowfootgrass	ryegrass (annual & perennial)	
foxtail (yellow & green)	smutgrass	purslane (common),,,;, speedwell (corn)
*Also controlled at the P	rogram 2 rates.	spurge (prostrate & spetted)

Fall Applications. Used as directed for late summer or early fall use, for crabgrass control through the early part of the next spring, this product will also control (at the "Program 3" rates) or suppress (at the "Program 2" rates) the following weeds when applied prior to their emergence:

bluegrass (annual) chickweed geranium (Carolina) pineappleweed bittercress henbit parsley-piert shepherdspurse

APPLICATION EQUIPMENT AND INSTRUCTIONS

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Before each application, calibrate the spreader according to the equipment manufacturer's directions for adjusting the spreader settings such that the spreader delivers the appropriate application rate recommended above. Apply this product uniformly over the lawn or ornamental turf area. A more uniform application can be made by spreading half of the required amount over the area and then applying the remaining half at a right angle to the previous direction. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.

STORAGE AND DISPOSAL

STORAGE: Store this product only in its original container in a dry, cool, secured storage area. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. PRODUCT DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or Local procedures. EMPTY CONTAINER DISPOSAL: Do not reuse bag. Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by State or Local authorities, buy burning. If burned, stay out of smoke. SPILL: In case of spill, sweep up material and dispose of material according to "product disposal" directions listed above.

CONDITIONS OF SALE AND WARRANTY

LANGE-STEGMANN CO. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. LANGE-STEGMANN CO. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of LANGE-STEGMANN CO. and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pest, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL LANGE-STEGMANN CO. OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM, THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

Dimension® is a registered trademark of Rohm and Haas Company.

LANGE® is a registered trademark of Lange-Stegmann Company

Net Weight 50 Pounds (22.68kg)

LANGE-STEGMANN COMPANY, INC.

1 Angelica Street - St. Louis, MO 63147