

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

24-D/TOX- (46)

DATE March 3, 1981

SUBJECT EPA Registration Number: 538-71  
Turf Builder Plus 2 for Grass: Caswell# 315, 659

FROM Deloris P. Graham RJD 3/9/81  
FHB/TSS E 3/11/81

TO Richard Mountfort  
Product Manager (23)

Releasable

Applicant: O. M. Scott and Sons  
Marysville, Ohio 43040

Active Ingredients . . . . . ?  
Inert Ingredients . . . . . ?

Background: Acute Oral, Acute Dermal, Eye Irritation and Dermal Irritation studies were submitted. These studies were conducted by Raltech Scientific Services. These data are under Accession Number 244290. Alternate method of support is used.

Recommendation:

1. The formulation on which these studies were conducted must be clearly identified.
  2. These studies are acceptable for this formulation.
  3. Appropriate labeling cannot be determined until formulation is identified.
  4. An Acute Inhalation study was not submitted and one must be submitted or a justification as to why this study is not necessary for this product.
- Label:
1. The appropriate signal word for the formulation used to conduct these studies is WARNING.
  2. When the appropriate formulation is identified, the necessary labeling can be determined.

Review:

1. Acute Oral Toxicity Study: Raltech Scientific Services; RT Lab. No 810167; November 14, 1980.

Procedure: 5M and 5F rats weighing between 208 and 253 g received a 5 g/kg dose of the test material and daily thereafter for 14 days. Necropsies were performed on all animals.

Results: No mortalities. Symptoms: none. Necropsy revealed mild hydrometra of uterus in 1/5F animals. LD50 for males and females was greater than 5 g/kg.

Study Classification: Core Guideline Data.

Toxicity Category: IV -CAUTION

2. Acute Dermal Toxicity Study: Raltech Scientific Services; RT Lab No. 810167; November 20, 1980.

Procedure: 5M and 5F New Zealand white rabbits weighing between 2300 and 2813 grams received a 2.0 g/kg dose at abraded skin sites and were placed under occlusive wrap for 24 hour exposure period. Observations were made at the end of the 24 hour exposure period and daily thereafter for 14 days. Necropsies were performed on all animals.

Results: No mortalities. Soft stool present in some animals. Slight to well defined erythema and edema at 24 hours, but had reversed itself by day 8. Desquamation present at day 5 and persisted in 4/10 animals through day 14. Necropsy revealed mildly reddened lungs and red foci, bilateral pitted surface of kidneys and diarrhea. LD50 for males and females was greater than 2.0 g/kg.

Study Classification: Core Guideline Data

Toxicity Category: III - CAUTION

3. Eye Irritation Study: Raltech Scientific Services; RT Lab No. 810167; November 6, 1980.

Procedure: 9 New Zealand white rabbits received a 0.1 g dose of the test material in one eye of each rabbit. The animals were divided into two groups. Group I consisted of 6 animals with treated unwashed eyes and Group II consisted of 3 animals with treated washed eyes. Observations were made at 24, 48, 78 and 96 hours and at 7 days.

Results: At 24 hours, 4/6 animals in Group I (4/6=5) and 0/3 in Group II had corneal opacity. Iris irritation present in 3/6 animals in Group I (3/6=5) and 0/3 in Group II at 24 hours. Conjunctive redness in 6/6 in Group I (2/6=2.0, 4/6=2.5) and 3/3 in Group II (3/3 = 2.0); chemosis in 5/6 in Group I (2/6 = 1, 1/6 = 1.5, 1/6 = 2.0, 1/6 = 2.5); discharge in 6/6 in Group I (1/6 = 1.0, 2/6 = 1.5, 3/6 = 2.0) and in 2/3 in Group II (2/3 = 1.0). No corneal opacity present at 72 hours. All other irritation cleared by day 7.

Study Classification: Core Guideline Data.

Toxicity Category: II - WARNING

4. Dermal Irritation Study: Raltech Scientific Services; RT Lab No. 810167; November 10, 1980.

Procedure: 3M and 3F New Zealand rabbits received a 0.5 g dose of the test material at 2 abraded and 2 intact skin sites per animal. The treated areas were placed under occlusive wrap for 24 hours. Observations were made at 24 and 72 hours.

Results: Slight to well defined erythema and slight edema at both intact and abraded sites at 24 hours. Irritation clear in all but one animal at one abraded site at 72 hours. Irritation Index was 0.7.

Study Classification: Core Guidelines Data.

Toxicity Category: IV - CAUTION

fertilizer  
plus lawn  
control  
weed

FOR GRASS  
BRAND  
plus 2 (R)  
Turf Builder (R) (Scotts)

FRONT:

Treats 2,000 sq ft (186 m<sup>2</sup>)

Formulated for  
Western and  
Southern  
Lawns

(Scotts (R))

Turf Builder

plus 2 (R)  
BRAND

FOR GRASS

weed control plus lawn fertilizer  
for use on bluegrass,  
fescue, ryegrass, bermuda, centipede  
or zoysia lawns.

Clears out weeds  
(see list on other side)

Gives complete feeding  
of Scotts long-lasting  
fertilizer for developing  
beautiful, green lawns.

DO NOT USE ON  
ST. AUGUSTINE, CARPETGRASS, CREEPING BENTGRASS,  
DICHONDRA, OR LIPPIA

NET WEIGHT 10 LBS (4.53 kg)

25-3-3

KEEP OUT OF REACH OF CHILDREN

WARNING

PRECAUTIONARY STATEMENTS

Hazard to Humans and Domestic Animals: Causes eye irritation. Do not get in eyes, on skin, or on clothing. In case of contact immediately wash eyes or skin with plenty of water. Get medical attention if irritation persists. Harmful if swallowed. Do not contaminate feed or foodstuffs.

Environmental Hazards: Do not contaminate water used for irrigational or domestic purposes. Avoid application on shrubs, flowers, fruit or vegetable plants.

Storage and Disposal: Do not reuse empty container. Wrap container and put in trash container.

ACTIVE INGREDIENTS:

2,4-Dichlorophenoxyacetic acid . . . . . .68%

2-(2-Methyl-4-chlorophenoxy) propionic acid . . .68%

INERT INGREDIENTS: . . . . .

FRONT CONTINUED:

EPA Reg No 538-71                      EPA Est. 538-OH-1  
Turf Builder plus 2 for Grass              25-3-3

Guaranteed Analysis

Total nitrogen (N) . . . . .	25%
0.7% ammoniacal nitrogen	
16.2% water soluble nitrogen	
8.1% water insoluble nitrogen	
Available phosphoric acid ( $P_2O_5$ ) . . . . .	3%
Soluble potash ( $K_2O$ ) . . . . .	3%
Derived from: monoammonium phosphate, urea, methylene ureas, potassium sulfate.	

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Product of USA

XXXX	(Scotts (R))	TURF BUILDER	weed control
		plus 2	plus lawn
		(R)	fertilizer
		(BRAND)	
		FOR GRASS	

W/S (NI)

XXXX

weed  
control  
plus lawn  
fertilizer

(Scotts (R)) TURF BUILDER  
plus 2 (R)  
BRAND

XXXX

(Scotts (R)) TURF BUILDER  
plus 2  
(R)  
BRAND

weed  
control  
plus lawn  
fertilizer

XXXXXX

XXXX TB+2 W/S 2M  
 EASY  
 OPEN BAG  
 FULL  
 WHITE  
 STRING

XXXX

Treats 2,000 sq ft (186 m<sup>2</sup>)

TURF BUILDER

(Scotts (R)) plus 2 FOR GRASS (R)  
 BRAND

weed control plus lawn fertilizer  
 for use on bluegrass, fescue, ryegrass,  
 bermuda, centipede or zoysia lawns.

Turf Builder plus 2  
 is a weed control plus  
 fertilizer for use only on  
 lawns. To fertilize vege-  
 tables, flowers, shrubs and  
 trees, look for these specially  
 formulated products from Scotts.

- Grow Vegetables
- Grow Flowers
- Grow Shrubs, Trees, Evergreens
- Grow Azaleas, Camellias,  
Rhododendrons
- Grow Transplants

WEEDS CONTROLLED

er	chickweed	eveningprimrose	lambquarters	plantain	shepherdspurse
tercress	chicory	filaree	mallow	prickly	smartweed
dweed	cinquefoil	fleabane	moneywort	lettuce	sowthistle
ck medic	clover (white)	ground ivy	morningglory	purslane	stitchwort
stly oxtongue	cudweed	healall	mustard	ragweed	thymeleaf
khorn	curly dock	henbit	pennywort	scarlet	sandwort
lthistle	dandelion	horseweed	pepperweed	pimpernel	vetch
rclover	dichondra	knotweed	pigweed	shadflower	yellow
tonweed	English daisy	(seedling)			rocket
ntella					

Directions for Use

- is a violation of federal law to use this product in a manner inconsistent with its labeling.
- use when weeds are up and growing actively.  
 On centipede lawns only, wait until after  
 the second mowing of the year but not before  
 mid-March. In the fall do not treat centipede  
 after the first of October; do not treat bahia  
 after the first of November.
- apply only when lawn is wet from dew, rain  
 or thorough watering (very important so  
 that the Turf Builder Plus 2 particles  
 will stick to the weed leaves instead of  
 falling to the soil).
- withhold watering lawn for at least 24  
 hours after application (to avoid wash-  
 ing particles off the weed leaves).
- apply on a calm day.
- apply at Scotts Spreader (Standard,  
 Automatic or Precision Flow control  
 Model) setting . . . . .
- DON'T use when rain is expected within  
 24 hours.
- DON'T use when daytime temperatures are  
 consistently 90° F or above.
- DON'T use when grass is so tall it touches  
 bottom of spreader (mow lawn first  
 in such situations).
- DON'T use on a newly seeded, sodded or  
 sprigged lawn until the new grass  
 has been mowed at least four times.  
 If seeding in late spring, delay  
 weed control application until early  
 fall. If seeding in the late fall,  
 delay weed control application until  
 spring.
- DON'T plant right after using Turf Builder  
 Plus 2. Wait at least one month.
- DON'T use on St Augustine, carpetgrass,  
 bahia, lippia, dichondra, creeping  
 bentgrass; nor on flowers, shrubs,  
 fruit, vegetable plants.

BAGK-CONTINUED:

### What to expect

This product does not work overnight. It is designed to provide slow, steady controlled action. Stems and leaves of weeds may begin to twist and curl in a few days, but a month or more may be required for complete control, especially when weather is dry or cool.

It is not necessary to rake out dead weeds. They will eventually disintegrate and disappear.

Only weeds growing at time of application will be eliminated. This product does not prevent weed seeds from producing new plants, whether such seeds are on the surface or buried in the soil. Nor does it control existing oxalis or crabgrass.

If particles become washed off weed foliage within 24 hours after application, control may be less effective. If there is no indication that it is working after 3 or 4 weeks of good growing weather another treatment may be needed.

A few weeds may be resistant to control. If this happens, please forward specimens so we can identify them and advise you further.

After weed control is achieved, you are urged to follow through on the basic needs of every lawn—fertilizer, water and regular mowing.

### Free bulletin service

As a Scotts user, you are entitled to a free subscription to Lawn Care, which has been helping lawnowners for over 50 years.

Unless you already receive Lawn Care, send us this coupon and we'll mail you the seasonal issues prepared especially for your region.

Cut out and mail to SCOTTS, the lawn people, Marysville, Ohio . 43041

NAME (please print)

ADDRESS

CITY

STATE

ZIP

#### Scotts Policy No-Quibble Guarantee

If for any reason you are not satisfied with results after using this product, you are entitled to get your money back. Simply send us evidence of purchase and we will mail you a refund check promptly.

SCOTTS...the lawn people  
MARYSVILLE, OHIO 43041

XXXX (Scotts (R)) TURF BUILDER  
plus 2 (R)  
BRAND

weed  
control  
plus lawn  
fertilizer