March 3, 1981

DATE

EPA Registration Number: 538-71
Turf Builder Plus 2 for Grass: Caswell

FROM

Deloris F. Graham
FHE/TSS

TO

Richard Mountfort
Product Manager (23)

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.

   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.

   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

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


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
Treats 2,000 sq ft (186 m²)

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, DICHOINDRA, OR LIPIPIA

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: .................... 98.64%
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 (P₅O₅) . . . . . . . . . . . . 3%
Soluble potash (K₂O) . . . . . . . . . . . . . . . . . . . 3%
Derived from: monosodium phosphate, urea, methylene ureas, potassium sulfate.

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

W/S (NI)
XXX TB+2 W/S 2M EASY OPEN BAG FULL

Turf Builder plus 2
is a weed control plus
fertilizer for use only on
cultures. 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**

<table>
<thead>
<tr>
<th>Chickweed</th>
<th>Evening Primrose</th>
<th>Lambsquarters</th>
<th>Plantain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cinquefoil</td>
<td>Filarie</td>
<td>Mallow</td>
<td>Prickly</td>
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<tr>
<td>Clover (white)</td>
<td>Flesbane</td>
<td>Moneywort</td>
<td>Lettuce</td>
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<tr>
<td>Curly Dock</td>
<td>Ground Ivy</td>
<td>Morning Glory</td>
<td>Purslane</td>
</tr>
<tr>
<td>Dandelion</td>
<td>Heal All</td>
<td>Mustard</td>
<td>Ragweed</td>
</tr>
<tr>
<td>Dichondra</td>
<td>Henbit</td>
<td>Pennywort</td>
<td>Scarlet</td>
</tr>
<tr>
<td>English Daisy</td>
<td>Horseweed</td>
<td>Pepperweed</td>
<td>Pimpernel</td>
</tr>
<tr>
<td>Knotweed</td>
<td>(Seedling)</td>
<td>Pigweed</td>
<td>Shadflower</td>
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<td></td>
<td></td>
<td>Shadflower</td>
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<td></td>
<td></td>
<td>Shepherdspurse</td>
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<td></td>
<td></td>
<td>Smartweed</td>
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<td></td>
<td></td>
<td>Southerly</td>
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<td></td>
<td></td>
<td>Stitchwort</td>
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<td>Thymeleaf</td>
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<td></td>
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<td>Sandwort</td>
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<td></td>
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<td>Vetch</td>
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<td></td>
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<td>Yellow</td>
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<td></td>
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<td>Rocket</td>
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Directions for Use

is a violation of federal law to use this product
in a manner inconsistent with its labeling.

- **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 law 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 seedings in late spring, delay weed control application until early fall. If seeding in the fall, delay weed control until spring.
- **DON'T** plant right after using Turf Builder Plus 2. Wait at least one month.

<table>
<thead>
<tr>
<th>Apply on a calm day.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply at Scotts Spreader (Standard, Automatic or Precision Flow control Model) setting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(treats 2,000 sq ft).</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual track</td>
<td></td>
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</tbody>
</table>

| with a rotary-type spreader. |   |
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

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

XXX (Scotts (R)) TURF BUILDER
plus 2 (R) BRAND
weed control
plus lawn fertilizer