UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: May 27, 1981

SUBJECT: EPA File Symbol: 338-RAI
Improved Super Turf Builder Plus 2: Caswell #

FROM: Deloris F. Graham 04/1 01/11/81
FNB/TSS

TO: Richard Mountfort
Product Manager (23)

Applicant: O.M. Scott and Sons
Marysville, Ohio 43041

Active Ingredient:
2,4-Dichlorophenoxyacetic acid..............................................1.60%
2-(2-Methyl-4-chlorophenoxy) propionic acid..........................2.06%
Inert Ingredients .....................................................................97.34%

Background: Submitted revised precautionary labeling and petition to
change signal word from WARNING TO CAUTION based on Policy and Criteria
Notice 2161.2. Method of support not indicated.

Recommendation:

(1) Based on the re-evaluation of the Eye Study initially submitted and the
new criteria set forth in Policy and Criteria Notice 2161.2, the
appropriate signal word is CAUTION.

Review:

#759034; December 19, 1979.

Procedure: 9 New Zealand white rabbits received a 0.1g dose of the test
material in one eye of each rabbit. The animals were divided into two
groups, Group I consisting of 6 rabbits with treated washed eyes and
Group II consisting of 3 rabbits with treated washed eyes.

Observations were made at 24, 48, 72 and 96 hours, and at 7 days after

treatment. If injury present at day 7, observations were made at 14 and
21 days.

Results: In Group I at 24 hours, 6/6 animals had corneal opacity (1/6 =
1.25, 1/6 = 2.5, 1/6 = 5.0, 1/6 = 7.5, 2/6 = 15), 5/6 iris irritation
(5/6 = 5) and 6/6 conjunctive redness (1/6 = 1.5, 3/6 = 2.0, 2/6 = 2.5),
chemosis (2/6 = 1.5, 2/6 = 2.0, 2/6 = 2.5) and discharge (1/6 = 1.0, 1/6
= 1.5, 2/6 = 2.0, 1/6 = 2.5, 1/6 = 3.0). Corneal opacity present through
day 21, Iris irritation and conjunctival irritation present through day 7.

In Group II at 24 hours, 3/3 animals had corneal opacity (1/3 = 7.5, 1/3
= 11.25, 1/3 = 15.0), 3/3 iris irritation (3/3 = 5), 3/3 conjunctive
redness (1/3 = 1.5, 1/3 = 2.0, 1/3 = 2.5), chemosis (2/3 = 1.5, 1/3 = 2.5) and discharge (2/3 = 1.0, 1/3 = 2.0). Corneal opacity clear at 48 hours; iris irritation persisting through 48 hours. Conjunctival redness through 96 hours. Other symptoms observed included blanching, purulent discharge, clear discharge.

Study Classification: Core Guideline Data.

Toxicity Category: III - CAUTION


Procedure: 9 New Zealand white rabbits received a 0.1g of the test material instilled into one eye of each rabbit. Animals were divided into two groups, Group I consisting of 6 animals with treated unwashed eyes. Observations were made at 24, 48 and 72 hours as well as 4, 7, 10, 13, 16, 19 and 21 days after instillation of the test material.

Results: At 24 hour in Group I, 6/6 animals had corneal opacity (1/6 = 5, 1/6 = 10, 3/6 = 15, 1/6 = 20); 6/6 iris irritation (6/6 = 5); 6/6 conjunctival redness (6/6 = 5), chemosis (4/6 = 2, 2/6 = 3) and discharge (6/6 = 3). Corneal opacity persisted through day 19. Iris irritation cleared by day 7 and conjunctival irritation by day 13.

At 24 hours in Group II, 2/3 corneal opacity (1/3 = 5, 1/3 = 15), 1/3 iris irritation (1/3 = 5), 3/3 conjunctival redness (3/3 = 2), chemosis (3/3 = 1) and discharge (3/3 = 1). Corneal opacity cleared by 72 hours, iris irritation by 48 hours and conjunctival irritation by day 7. Pannus was also observed.

Study Classification: Core Guideline Data.

Toxicity Category: III - CAUTION

(3) Eye Irritation Study: WIL Research Laboratories, Inc.; WIL = 80122; May 28, 1980.

Procedure: 9 New Zealand white rabbits received a 100 mg in the right eye of each animal. Animals were divided into two groups, Group I consisted of 6 animals with treated unwashed eyes, and Group II consisted of 3 animals with washed eyes. Observations were made frequently during the day of dosing and at least twice daily thereafter for 14 days.

Results: At 24 hours, 4/6 animals had corneal opacity (3/6 = 5, 1/6 = 10); no iris irritation; 6/6 conjunctive redness (3/6 = 2, 3/6 = 3); 6/6 conjunctive chemosis (5/6 = 2, 1/6 = 3) and 4/6 conjunctive discharge (2/6 = 1, 2/6 = 3). Corneal opacity clear in all animals except 1 on day 10. All conjunctive irritation clear by day 7.
In Group II, no corneal opacity or iris irritation. 3/3 had conjunctive redness (2/3 = 1, 1/3 = 2) and chemosis (2/3 = 1, 1/3 = 2). All irritation clear by day 4.

Study Classification: Core Guideline Data

Toxicity Category: [ ] - CAUTION [ ] not irritant
The material not included contains the following type of information:

[ ] Identity of product inert ingredients
[ ] Identity of product impurities
[ ] Description of the product manufacturing process
[ ] Description of product quality control procedures
[ ] Identity of the source of product ingredients
[ ] Sales or other commercial/financial information
[ ] A draft product label
[ ] The product confidential statement of formula
[ ] Information about a pending registration action
[ ] FIFRA registration data
[ ] The document is a duplicate of page(s) ________
[ ] The document is not responsive to the request

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.