

US EPA ARCHIVE DOCUMENT

159 (Case)

DATE: September 10, 1981

SUBJECT: EPA Registration Number: 239-2457  
ORTHO Soybean Seed Protectant (MO) 2X

FROM: Deloris F. Graham *DGF 9/14/81*  
FHB/TSS *E 9/15/81*

TO: Henry Jacoby  
Product Manager (21)

002049

Applicant: Chevron Chemical Company  
Ortho Agricultural Chemicals Division  
940 Hensley Street  
Richmond, California

Active Ingredient:

Captan . . . . .	47.3%
Related derivatives . . . . .	2.7%
Inert Ingredient . . . . .	50.0%

Background: Submitted Eye Irritation Study to support change in signal word from CAUTION to DANGER. Data under accession number 245629. Study conducted by Chevron. Cite-all method of support.

Recommendation:

- 1) Based on the Eye Irritation Study, the appropriate signal word is DANGER.
- 2) Based on the new criteria for evaluating the Eye Study, if corneal opacity and conjunctive irritation has reversed itself in 21 days or less, the appropriate signal word is WARNING, since only 14 days were reported that determination could not be made.
- 3) For future submissions in the Eye Irritation Study, 9 animals (6 with treated unwashed eyes and 3 with washed eyes) must be used and observations made for 21 days.

Label:

- 1) The appropriate signal word is DANGER.
- 2) The statement "Do not feed treated seed to animals. Do not use treated seed for human consumption" must be deleted from Precautionary Statements and placed under Directions For Use.
- 3) The statement "Seeds treated with ORTHO Soybean Seed Protectant (MO) 24 sold or shipped as feed on foodstuffs may be considered adulterated under state and federal laws. Treated seed must be labeled as follows: "TREATED SEED. DO NOT USE FOR FOOD, FEED OR OIL." This statement must be deleted from Precautionary Statements and placed under Directions For Use.

- 4) The statement of practical treatment must be revised similar to the following:

In case of eye contact, immediately flush eyes with fresh water for 15 minutes and see a doctor. If swallowed, give a large amount of water to drink, make person vomit by placing finger in back of throat, and call a doctor. Never give anything by mouth to an unconscious person. For skin contact, wash with plenty of soap and water. See a doctor if irritation occurs or rash develops.

Note to Physician: Emergency Information - Call (415) 233-3737.

- 5) The statement "Keep out of lakes, streams or ponds" must be revised to read "Do not apply directly to lakes, streams or ponds."

Review:

- 1) Eye Irritation Study: Chevron; Socal 1078/30:84; September 14, 1977.

Procedure: 6 New Zealand white rabbits received a 0.1 ml of test material in one eye each. Observations made at 1 hour, 1,2,3,7,10 and 14 days. !

Results: At day 1, 5/6 animals had corneal opacity (5/6 = 5); 5/6 had iris irritation (5/6 = 5); could not score one animal for iris irritation due to corneal opacity and/or chemosis; 6/6 had conjunctive redness (6/6 = 3), chemosis (6/6 = 3) and discharge (3/6 = 2, 3/6 = 3).

At day 7, 6/6 corneal opacity (3/6 = 10, 1/6 = 15, 2/6 = 20); 5/6 iris irritation (5/6 = 5); 6/6 conjunctive redness (6/6 = 3), chemosis (4/6 = 1, 2/6 = 2), and discharge (1/6 = 1, 5/6 = 2).

At day 10, 6/6 had corneal opacity (2/6 = 15, 4/6 = 20), 2/6 iris irritation (2/6 = 1); 6/6 conjunctive redness (6/6 = 3), chemosis (6/6 = 1); and discharge (6/6 = 2).

At day 14, 6/6 had corneal opacity (4/6 = 15, 2/6 = 20); 6/6 conjunctive redness (6/6 = 3), chemosis (5/6 = 1, 1/6 = 2), and discharge (6/6 = 3).

Study Classification: Core Minimum Data. Nine animals (6 with unwashed treated eyes and 3 with washed eyes) must be used and observations made for 21 days.

Toxicity Category: I-DANGER

PRECAUTIONARY STATEMENTS 10 pt

HAZARDS TO HUMANS & DOMESTIC ANIMALS 10 pt

DANGER 10 pt

Corrosive to eyes. Causes eye damage. May cause allergic skin reactions. Harmful if swallowed or inhaled. Do not get in eyes. Wear goggles when handling. Avoid contact with skin and clothing. Avoid breathing of dust or vapor. If conditions or frequency of use increase the potential of exposure, inhalation can best be avoided by wearing a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U.S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR, Part 11. Wash hands after use. Remove and launder clothing before reuse. Do not feed treated seed to animals. Do not use treated seed for human consumption. Seeds treated with ORTHO Soybean Seed Protectant(MO)2X sold or shipped as feed or foodstuffs may be considered adulterated under state and federal laws. Treated seed must be labeled as follows: "TREATED SEED. DO NOT USE FOR FOOD, FEED OR OIL."

STATEMENT OF PRACTICAL TREATMENT 10 pt

In case of eye contact, immediately flush eyes with fresh water for 15 minutes and see a doctor. If swallowed, give a large amount of water to drink, make person vomit, and call a doctor. For skin contact, wash with plenty of soap and water. See a doctor if irritation occurs or rash develops.  
Note to Physicians: Emergency Information - call (415) 233-3737.

ENVIRONMENTAL HAZARDS 10 pt

This product is toxic to fish. Keep out of lakes, streams or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

10pt Keep Out of Reach of Children 100+

14pt DANGER

See Side Panel for Additional Precautionary statements.

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STORAGE AND DISPOSAL 10/15

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.  
Open dumping is prohibited.  
Do not reuse empty container.

STORAGE 10/15

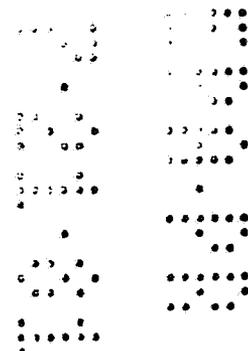
Keep pesticide in original container.  
Store in cool, dry place.  
Protect from excessive heat.  
Do not store or transport near feed or food.

PESTICIDE DISPOSAL 10/15

Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to federal, state or local procedures under the Resource Conservation and Recovery Act.

CONTAINER DISPOSAL 10/15

Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill or by incineration if permitted by state and local authorities.



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### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

**CAUTION**  
May cause eye irritation. Harmful if swallowed. Do not get in eyes. Avoid contact with skin. Avoid inhalation of dust. In case of eye contact, flush eyes with fresh water for at least 15 minutes. If irritation persists get medical attention. If swallowed, promptly drink a large quantity of water and induce vomiting. Get medical attention. Wash hands after use.  
Toxic Physiological Emergency Information—call (415) 233-3737.  
From the Physiological Emergency Information—call (415) 233-3737.  
This product is toxic to fish. Keep out of lakes, streams or ponds.

**ENVIRONMENTAL HAZARDS**  
This product is toxic to fish. Keep out of lakes, streams or ponds.

### STORAGE AND DISPOSAL

**PROHIBITIONS**  
Do not contaminate water, food, or feed by storage or disposal. Cleaning of equipment.  
Do not reuse empty container.

**STORAGE**  
Keep out of original container.  
Store in cool, dry place.  
Do not store in excess heat.  
Do not store or transport near feed or food.

**CONTAINER DISPOSAL**  
When container is empty, immediately wash thoroughly and destroy.

DR1HO Soybean Seed Protectant (MIO) 2X is a formulation specially designed for treating soybean seed on the farm at planting time. When used at the recommended rate it will result in increased deposit of chemical on the seed with all types of planters, including air planters, plate planters and plate planters, except the International Harvester Convoy Planter.  
DR1HO Soybean Seed Protectant (MIO) 2X protects sound and/or mechanically injured

seed against seed and soilborne diseases which may cause seed rot and seedling blight at planting time. It also provides molybdenum which is essential to the nitrogen-fixing nodules on the roots of soybeans.  
DR1HO Soybean Seed Protectant (MIO) 2X is designed to protect seed at planting time. DR1HO Soybean Seed Protectant (MIO) 2X is applied to the seed at planting time to avoid the additional handling of commercial seed treatment with its associated risk to the seed.  
Soybeans are most likely to benefit from treatment with this product when planted in acidic soils (soils needing liming), heavily leached soils or soils high in iron content.

### DIRECTIONS: MEASURING CUP ENCLOSED.

Use as a planter box treatment at the rate of 3 1/2 oz./100 lbs. seed (2 oz./bushel). When seed is planted at the rate of one bushel per acre, this will provide the needed 1/2 oz. of sodium molybdate per acre.  
To achieve adequate coverage, Seed Protectant (MIO) 2X and mix thoroughly with a stick, amount of DR1HO Soybean Seed Protectant (MIO) 2X and mix thoroughly with a stick, then put remainder of Seed Protectant (MIO) 2X and mix thoroughly with a stick, then put remainder of Seed Protectant (MIO) 2X in a suitable container, then pouring treated seed into planter box.  
Seed Protectant (MIO) 2X is a suitable container, then pouring treated seed into planter box.  
Seed Protectant (MIO) 2X is a suitable container, then pouring treated seed into planter box.

### CONDITIONS OF SALE:

1. Chevron Chemical Company (Chevron) warrants that this material conforms to the chemical description on the label and is reasonably fit for use as stated herein. Chevron neither makes, nor authorizes any agent or representative to make any other warranty of FITNESS or MERCHANTABILITY, guarantee or representation express or implied, concerning this material.  
2. Critical and unforeseeable factors beyond Chevron's control prevent it from eliminating all risks in connection with the use of chemicals. Such risks include, but are not limited to, damage to plants and crops to which the material is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the uses stated hereon and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Chevron under 1 above) resulting from handling, storage, and use of this material.

### Chevron Chemical Company

Ortho Agriculture Chemicals Division  
San Francisco CA 94119 Richmond CA 94804  
Form 9724A Product 5320 Made in U.S.A.  
EPA Reg. No. 239-5431 EPA Est. 239-MO-1



# Soybean Seed Protectant (MIO) 2X

NOTE: Pry open cover with screwdriver or similar tool, and pull off by hand.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS  
**NET WEIGHT 10 POUNDS**