

P-2, Amulorin

PU 21 1624-120

P: 134

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 1624-120	DATE OF ISSUANCE 7/15/91
	TERM OF ISSUANCE Conditional	
	NAME OF PESTICIDE PRODUCT FireDrake ZL	

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

U. S. SOREX and Chemical Corporation
 5075 Wilshire Blvd.
 Los Angeles, CA 90010

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The Administrator, under Section 3(c)(7)(C) of the Federal Insecticide, Fungicide and Rodenticide Act, is directing you to provide you:

1. You will submit the data listed below, conducted in accordance with the 40 CFR Part 158 test guidelines referred to below:

Guidelines Reference Number	Title of Study	Date Due
103-1	Leaching and absorption/desorption	4/12/92

At this time, the Agency is not requiring additional toxicity data for this new product. Depending on the outcome of the leachability study, additional toxicity data may be required. The Agency is concerned about the potential for "leached zinc" or "zinc discharge" from the product. The Agency is aware of a recent manufacturing process that is employed that may result in zinc carbonate or associated

ATTACHMENT IS APPLICABLE

BEST AVAILABLE COPY

SIGNATURE OF APPROVING OFFICIAL

[Signature]

DATE

7/15/91

chemicals-containing waste discharges, the Agency may require additional toxicity and/or other data.

2. If necessary, you will submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

3. You will submit production information (pounds or gallons produced) for this product for the fiscal year in which the product is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year. This information should be submitted to:

U. S. Environmental Protection Agency
Office of Pesticide Programs (H7504C)
Document Processing Desk (RSB)
401 M Street SW
Washington, DC 20460

4. You will add the phrase "~~EPA Registration No. 1624-120~~" to your label before you release the product for shipment.

5. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

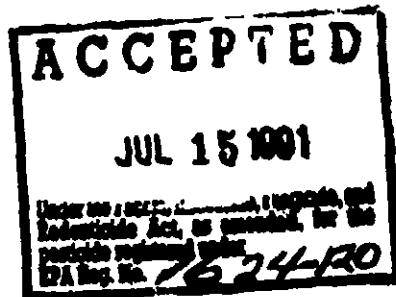
Susan T. Lewis
Susan T. Lewis
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure A/S

BEST AVAILABLE COPY

FIREBRAKE® ZB

A Fire Retardant and Fungicide.
For Manufacturing Use Only in Producing
Plastics and Coatings.



214

ACTIVE INGREDIENT:

Zinc Borate ($2ZnO \cdot 3B_2O_3 \cdot 3 \cdot 5H_2O$).....100.00%

LABEL
FILE
COPY

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS: Hazards to Humans and Domestic Animals.
Causes moderate eye irritation. Avoid contact with eyes or clothing.
Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT: IF SWALLOWED, immediately contact a physician or Poison Control Center. If these are unavailable, give the victim 1 or 2 glasses of water and induce vomiting by touching back of throat with fingers. Do not induce vomiting or give anything by mouth to an unconscious person. IF IN EYES, flush with plenty of water. Call a physician if irritation persists. IF ON SKIN, remove contaminated clothing and wash skin with soap and water. IF INHALED, remove victim to fresh air.

Environmental Hazards

Do not discharge effluent containing this product directly into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency.

DIRECTIONS FOR USE: Federal law prohibits use of this product in a manner inconsistent with its labeling. Read Technical Bulletin for formulation details.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a dry place. Do not store where children or animals may gain access.

PESTICIDE DISPOSAL: Wastes resulting from the use of the product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

Manufactured By
United States Borax & Chemical Corporation
Los Angeles, CA 90010

EPA Est. 1624-CA-01
EPA Reg. No. 1624-REN
©1989 USB&CC



Net Contents: 250 lbs (113.4 kg)

0689

FIREBRAKE® ZB Zinc Borate
A Fire Retardant and Fungicide.

For Manufacturing Use Only in Producing Plastics and Coatings.

FIRE RETARDANT PROPERTIES:

FIREBRAKE ZB has been used extensively as a fire retardant, smoke suppressant, and afterglow suppressant in polyvinyl chloride, nylon, epoxy, polyolefin, polyester, polyurethane, EPDM and SBR rubbers, etc. The water of hydration is retained even at temperatures up to 290°C (554°F), thereby allowing FIREBRAKE ZB to be used in systems requiring high processing temperatures. In halogen-containing systems, the usage level of FIREBRAKE ZB is in the range of 3-25 phr (parts per hundred parts of resin). In a halogen-free system, the recommended usage level is in the range of 20-250 phr.

FUNGICIDAL PROPERTIES:

FIREBRAKE ZB controls mixed fungi such as Aspergillus niger, Penicillium funiculosum, Chaetomium globosum, Glicocladium virens and Aureobasidium pullulans.

PLASTICS:

As a fine powder, FIREBRAKE ZB can be fed into an extruder, calender machine, or injection molding machine in much the same way as other solid polymer additives. The effective additive level is dependent on fungal susceptibility of the product, as well as the ultimate conditions for the use of the product. For interior applications such as PVC carpet-backing, wall coverings, auto upholstery, shower curtains, and urethane mattresses, a loading of 3-20 phr of FIREBRAKE ZB is recommended. For exterior applications such as polyolefin wire and cables, PVC tenting and awnings, 3-30 phr of FIREBRAKE ZB is recommended.

COATINGS:

FIREBRAKE ZB is a water insoluble fungicide. Its optimum performance is obtained when FIREBRAKE ZB is uniformly dispersed in coatings.* Therefore, it should be incorporated during the pigment dispersion cycle in the coating process.

A good starting point formulation for latex coating is 1-1.5 lb/gal of FIREBRAKE ZB as a fungal inhibitor. Since oleoresinous systems are better nutrient sources for microorganisms, higher levels of FIREBRAKE ZB are required to make oil and alkyd coatings fungal resistant. A minimum level for use in such systems is 1.25 lb/gal, to 3.0 lb/gal.

*According to ASTM, coating is defined as a liquid, liquefiable or mastic composition which is converted to a solid protective, decorative, or functional adherent film after application as a thin layer.

FORMULA: $22\text{ZnO} \cdot 3\text{B}_2\text{O}_3 \cdot 3.5\text{H}_2\text{O}$	
1/3 ZnO (theo.)	37.45
1/3 B ₂ O ₃ (theo.)	48.05
1/3 H ₂ O (theo.)	14.50
FORMULA WEIGHT	434.66

COLOR: White

REFRACTIVE INDEX 1.58

PARTICLE SIZE: Nominally-325 mesh. Mean particle size is in range of 2 to 10 microns.

CRYSTAL DENSITY 2.8 g/cm³

BULK DENSITY: 30 to 50 pounds per cubic foot, typical.

SOLUBILITY: Virtually insoluble in water below 100°F. Sparingly soluble at higher temperatures. Can be hydrolyzed with acids and bases.

OIL ABSORPTION 35g oil/100g

CONTAINERS: 250 lb. fiber drums with polyethylene liner; 50 lb. bags with polyethylene liners.

U.S. PATENTS RE 27,424 and 3,718,615
United States Borax & Chemical Corporation
Los Angeles, CA 90010

EPA Reg. No. 1624-REN

©1999 USBS&CC

BEST AVAILABLE COPY