

45728-14

3/1/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

Taminco Inc.
Two Windsor Plaza, Suite 411
21320 Sweet Clover Place
Ashburn, VA 20147

MAR 1 2012

Attention: Vincent J. Piccirillo

Subject: Thionic Ziram Technical
EPA Registration No. 45728-14
Amendment Dated December 5, 2011

The amendment, submitted in connection with registration under section 3©(7)(A) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, to add preservation for dried films and short term spoilage protection for water-reduced industrial materials, is acceptable, provided that you:

Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3©(5) and sec. 4 uses when the Agency requires all registrants of similar products to submit such data.

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 constitutes acceptance of these conditions.

A stamped copy of the "accepted" product labeling is enclosed for your records. Submit two (2) copies of final printed labeling before you release the product for shipment.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell
Product Manager (33)
Regulatory Management Branch 1
Antimicrobials Division (7510P)

Enclosure



Thionic® Ziram Technical

ACTIVE INGREDIENT:
 Ziram (Zinc dimethyldithiocarbamate) 98.25 %
 INERT INGREDIENTS: 1.75 %
 TOTAL 100.0 %

EPA Reg. No. 45728-14

EPA Est. 32537-BEL-1

KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Emergencies involving a Spill, Leak, Fire, Exposure, or Accident, Contact: CHEMTREC at (800) 424-9300. For product usage information, phone Taminco Inc., at (800) 223-3258 from 9:00 AM to 5:00 PM Eastern time.	
NOTE TO PHYSICIAN	
Possible mucosal damage may contraindicate gastric lavage.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive, causes irreversible eye damage. May be fatal if swallowed or inhaled. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Do not breathe dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear a mask or pesticide respirator jointly approved by the Mining Enforcement and Safety Administration, and the National Institute for Occupational Safety and Health. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment washwaters.

ACCEPTED
with COMMENTS
 EPA Letter Dated:
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DIRECTIONS FOR USE

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

For use only by manufacturers in the formulation of rabbit repellents or in the formulation of fungicide products for the following uses: almonds, apples, apricots, blueberries, blackberries, boysenberries, dewberries, youngberries, cherries, conifers/pine seedlings, grapes, nectarines, ornamentals, and ornamental fruit varieties, peaches, pears, pecans, strawberries and tomatoes. This product may be used in the formulation of material preservatives for the following nonpesticide products: latex paint, paper and paperboard, paper coatings, adhesives, dried films and industrial yarns and fabrics and short term spoilage protection for water reduced industrial materials. See Bulletin Thionic-01 for directions for these uses. Subsequent formulators are responsible for providing documentation to support the registration of their product(s).

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place in the original container and away from sources of ignition.

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

CONTAINER HANDLING: Do not reuse or refill this container. Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Taminco Inc. makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label.

NET WEIGHT: 55 POUNDS (25 KG)



**Taminco, Inc.
Two Windsor Plaza, Suite 411
7540 Windsor Drive
Allentown, PA 18195**

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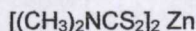
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 45728-14

THIONIC® ZIRAM TECHNICAL

DESCRIPTION

This Technical Bulletin is directed to formulators and their personnel to provide adequate information on the product. This information should be considered the basis for development and utilization of safe and proper handling procedures. For any further information, contact Taminco, Inc.

CHEMICAL FORMULA



PHYSICAL AND CHEMICAL PROPERTIES

- Active Ingredient
Zinc dimethyldithiocarbamate 98.0%
- Physical State
Creamy-white powder
- Odor
Nil
- Melting Point
Decomposes > 250° C
- pH (in 4% aqueous suspension)
7.29
- Solubility (in H₂O)
Soluble in part
- Bulk Density (g/cc)
0.25

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PACKAGING

55 Pounds net multi-ply paper bags or other approved packaging.

CHEMICAL REACTIVITY

- Ziram is stable and non-corrosive. However, excessive heat and moisture should be avoided as should contact with strong oxidizers.
- Contact with inorganic acids liberates carbon disulfide.
- Incompatible with copper and mercury compounds.

FLAMMABILITY AND FIREFIGHTING

This product is considered noncombustible. However, under fire conditions, it may decompose and emit toxic fumes of carbon, nitrogen and sulfur oxides.

Use standard extinguishing media - water, carbon dioxide, dry chemicals, or foam. When there is a potential for exposure, wear a self-contained breathing apparatus in positive pressure mode. In addition, impervious clothing should be worn.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment washwaters.

TOXICOLOGY

TOXICITY TO ANIMALS*

- Oral LD₅₀ (mg/kg) 320* (rat)
- Dermal LD₅₀ (mg/kg) >2,000* (rat)
- Inhalation LC₅₀ (mg/l) 0.07* (rat)
- Primary Eye Irritation Corrosive* (rabbit)
- Primary Skin Irritation No irritation (4-hrs) * (rabbit)
- Skin Sensitization Sensitization rate of 30% * (guinea pig)

* Taminco Inc. Proprietary Study

HUMAN TOXICITY

ZIRAM is irritating to eyes, nose, throat, and skin. May be fatal if swallowed or inhaled. Harmful if absorbed through skin.

An antabuse-like reaction with flushing, sweating, headache, weakness and hypotension may occur when ethyl alcohol (alcoholic beverages) is ingested following exposure to this material.

Symptoms: Rhinitis, laryngitis, pharyngitis, gastritis, dermatitis disorders in metabolism, blood picture and in liver function.

SAFETY MEASURES, FIRST AID

- Wear chemical resistant gloves, inhalation mask or respirator, safety goggles or face shield, and coveralls.
- Provide adequate ventilation.
- Keep out of reach of children and away from food, drink, and feeding stuffs.
- Wash thoroughly with soap and water after handling.
- In case of contact with eyes, rinse immediately with plenty of water and contact a physician.
- In swallowed, drink large quantities of water and seek medical attention immediately.
- Store in a cool dry place, away from sparks or open flame.

APPLICATIONS

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

This product may be used in the formulation of fungicide products for the following uses:

- * Almonds
- * Apples
- * Apricots
- * Blueberries
- * Blackberries
- * Boysenberries
- * Dewberries
- * Youngberries
- * Cherries
- * Conifers/Pine Seedlings

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- * Grapes
- * Nectarines
- * Ornamentals
- * Ornamental Fruit Varieties
- * Peaches
- * Pears
- * Pecans
- * Strawberries
- * Tomatoes

This product may be used in the formulation of the following non-pesticide products:

- latex paint
- paper and paperboard
- paper coatings
- water reduced industrial materials
- adhesives
- industrial yarns and fabrics
- dried films

Use Directions

Mold inhibitor for Latex Paint - Exterior exposure testing suggests certain loadings as starting points for the evaluation of THIONIC. For exterior latex paints, use 1 to 3% of THIONIC based on total weight (equal to about 10 to 30 lbs. per 100 gallons), added during the pigment dispersion stage of manufacture.

Do not use in formulation containing metallic drier.

Mold Resistant Paper and Paperboard - To impart mold resistant properties to paper or paperboard, apply as a surface treatment on size press or calendar stack. THIONIC diluted as required to retain 0.5% solids on the weight of the sheet. See TAPPI Standard T487M-54 for mold resistance evaluation method. Do not use for the manufacture of mold-resistant paper or paperboard intended for food packaging purposes.

Preservation of Paper Coatings - To preserve non-food contact paper coatings, add 0.1% THIONIC by weight or the dry starch or protein.

Preservation of Adhesives - To preserve starch and synthetic latex adhesive formulations (dry, after water is added by end-user) against bacterial degradation add 0.185% to 0.5% THIONIC by weight of total composition, during manufacture of adhesive composition. This product is cleared for use in adhesives used in food packaging (FDA § 175.105).

Preservation of Industrial Yarns and Fabrics - For long-term protection of industrial yarns and fabrics from mildews, rots and bacterial decomposition, use 1.25% ± 0.25% THIONIC based on the weight of the material applied in water dispersion.

Preservative for Dried Films - The dried films of water-based or water-reduced industrial materials are often subject to defacement by mold and mildew. Such materials include wall and ceiling textures, wallpaper paste, wallboard, joint compounds, spackles, wood fillers, caulks and sealants. Thionic should be added at 0.185 to 0.5% (based on potential dry-film solids weight) during the initial phase of formula preparation to assure adequate wetting and disbursement.

Short-term Spoilage Protection - Thionic can supply short-term protection from spoilage to water-reduced industrial materials including wallboard compounds. For successful control of spoilage, the use of good quality water and clean manufacturing conditions are required. In ready-mix products, add 0.4 - 0.5% Thionic to the water-based formula during manufacture, based on total weight. In dry-powder formulas, the amount of Thionic added during final manufacture should be sufficient to attain 0.4 - 0.5% Thionic in the final mixture, once water is added at the use site.

IMPORTANT

Consult with Taminco Inc. or the Environmental Protection Agency to obtain information on currently registered uses for Ziram as they are subject to change.

Subsequent formulators are responsible for providing documentation to support any required registration of their product(s).

Thionic® is a registered trademark of Taminco S.A., a Belgian corporation.

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