

MAY 25 1995

Mr. Allen F. Bollmeier
Angus Chemical Co.
1500 E. Lake Cook Road
Buffalo Grove, Illinois 60089-6556

Dear Mr. Bollmeier:

Subject: Amical 48
EPA Reg. No. 48301-19
Amical Flowable
EPA Reg. No. 48301-24
Your Submissions of May 11, 1995

The label amendments submitted on May 11, 1995, in connection with registration under FIFRA sec. 3(c)(7)(A), are acceptable provided that you:

1. Satisfy all outstanding data requirements as identified by Special Review and Reregistration Division prior to reregistration.

2. Make the following label revision:

The signal word "Danger" must appear twice on the label. Once immediately below "Keep Out of Reach of Children" and again in the Precautionary Statements section. The first signal word must be in the appropriate type size as stated in the regulations. The signal word which appears in the Precautionary Statements section may be smaller but should still be large enough to stand out from the other statements.

3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

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.

Stamped copies of the labels are enclosed for your records.

Sincerely yours,



Connie B. Welch
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosures

7505C:C.Grable:cg:5/22/95

377

DRAFT LABEL

AMICAL®48
Antimicrobial Agent

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAY 25 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
48301-19

Active Ingredient: Diiodomethyl p-tolyl sulfone 95.0%
Inert Ingredients: 5.0%

KEEP OUT OF REACH OF CHILDREN
Precautionary Statements
Hazards to Humans and Domestic Animals
DANGER

CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE

Do not get in eyes or on clothing. May be harmful if absorbed through the skin. Avoid contact with skin. Do not take internally. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Wear goggles, face shield, or safety glasses.

Statement of Practical Treatment

IF IN EYES: Hold eyes open and flush with a steady gentle stream of water for 15 minutes. Get medical attention.

IF ON SKIN: Wash thoroughly with soap and water. Get medical attention.

IF SWALLOWED: Drink a large quantity of milk, egg white, or gelatin mixture, or, if these are not available, a large quantity of water. Avoid alcohol.

Note to Physician: Probable mucosal damage may preclude the use of gastric lavage.

Environmental Hazards

This pesticide is toxic to fish. Do not contaminate water when disposing of equipment washwaters. 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.

EPA Reg. No. 48301-19

EPA Est. No. 64776- OK-1

ANGUS Chemical Company
1500 East Lake Cook Road
Buffalo Grove, IL 60089

Del...

Storage and Disposal

Storage:

Do not contaminate water, food or feed by storage or disposal. Store in a dry area. Keep container closed when not in use.

Pesticide Disposal:

Wastes resulting from use of this 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.

Directions for Use

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

Use In Paints

AMICAL 48 is an effective mildewcide and algicide for exterior and interior paints, fire-retardant insulation coating and air duct coatings. Use levels in paint and duct coating will vary depending upon the formulation and expected severity of field conditions. Generally, AMICAL 48 will impart protection when used at levels of between 1.6-5 lb AMICAL 48 per 100 gallons of paint for severe situations while 1-3 lb AMICAL 48 per 100 gallons of paint are sufficient for less severe conditions. AMICAL 48 should be added during the last few minutes of the pigment grind for maximum dispersion. For mildew control on fire-retardant coating add AMICAL 48 at 0.0015 to 0.3% at point in production process to ensure sufficient mixing with other dry ingredients.

Use In Pigment Dispersions, Inks, Emulsion And Extender Slurries

To inhibit the growth of spoilage fungi during storage of water-based suspensions and dispersions. AMICAL 48 will impart protection when dosed at 0.02-0.15% (w/w). Add AMICAL 48 at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added.

Use In Adhesives, Caulks And Sealants

AMICAL 48 is recommended for use in adhesives and binders e.g., joint compounds, tile mastics, wallpaper paste, carpet backing, air filter and foil scrim Kraft laminate; and sealants and caulks where mildew growth on the applied or stored product may be a problem. For control of mildew growth add 0.01-0.30% AMICAL 48 at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added.

Use In Leather Tanning

AMICAL 48 is used in protecting chrome or vegetable tanned leather from mold and mildew during in-tannery wet processing and for protecting wet-blue during long storage and long transportation times. For normal protection of chrome-tanned cattle hides (based on white weight of hides) use 0.01-0.02%, for sheep hides (based on drained pickle weight) 0.05-0.08%, and for goat and small skins use levels should be calculated on the dry basis of the skin weight, assuming limed weight to be 20% dry basis and pickled weight to be 33% dry basis. When long hold or export protection is required, use 0.02-0.04% for cattle, 0.08-0.15% for sheep, and on goat and small skins follow recommendations for normal protection. Use level recommendations during retan/color/fatliquor protection of chrome-tanned hides for all hide types are 0.1-0.3 (% on wet blue weight). In all applications, add the dry AMICAL 48 through the drum door, preferably by sprinkling across the width of the drum. This should be done just prior to chrome addition, or together with the formate, if formate is added dry prior to chrome. In the case of retan/color/fatliquor, add AMICAL 48 prior to the prime fatliquor feed.

Use In Wood Preservation (For Formulating Use Only)

AMICAL 48 can be used for control of mildew, sapstain, and wood rotting organisms. Incorporate AMICAL 48 into appropriate vehicles to protect wood from stain and decay. AMICAL 48 can be utilized in either aqueous or solvent-based systems at concentrations ranging from 0.3-1.0% (w/w). Solvent-based systems containing mineral spirits require a suitable co-solvent for the incorporation of AMICAL into the system. Formulators are responsible for obtaining EPA registration of formulated products.

Use In Metalworking Fluids

AMICAL 48 is recommended for use in metalworking fluids and lubricants to prevent fungal growth. The level of AMICAL 48 to be incorporated into metalworking fluid concentrate will vary depending upon the dilution factor recommended by the manufacturer. For efficient fungistatic activity, a concentration 100 to 3000 ppm of AMICAL 48 in the diluted fluid is suggested. AMICAL 48 should be dissolved in an appropriate solvent prior to addition to the metalworking fluid.

Use In Rubber And Plastic Products

AMICAL 48 is recommended for PVC, polyurethane, rubber, thermoplastic rubber and other polymeric-based products, coatings, adhesives, foams, and sealants requiring protection against microbial deterioration. For control of microbial deterioration use 0.1-0.8% AMICAL 48 based upon total weight of solids in the formulation. AMICAL 48 can be incorporated into the formulation at any convenient stage of the manufacturing process.

Use In Textiles And Non-Wovens (Non-Clothing)

To prevent mildew growth on products such as canvas, carpet, cordage, drapes, filters, and shower curtains. Use levels depend upon the expected severity of exposure or end-use conditions. In general 0.5 to 5.0 lb of AMICAL 48 per 1000 lb of dry fabric (500-5,000 ppm) is needed. AMICAL 48 is best added together with the water-repellent emulsion or dye to ensure durability.

Use In Paper Production

This product aids in the control of objectionable fungi in pulp, paper mills and the additive system and for the preservation of pulp, pigment slurries, alum, emulsions, adhesives, defoamers, polymers and paper products. This product is used to inhibit fungal growth which causes discoloration, odor and degradation in paper and paperboard. This product is not cleared for use in the manufacture of paper and paperboard products that come in contact with food.

Additions can be made on a continuous or intermittent basis, depending upon the severity of the contamination. Badly fouled systems must be cleaned before treatment is begun. Apply at a point in the system where the product will be uniformly mixed.

Intermittent or Slug Method - Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.0008 to 0.8 lb per ton of pulp, or paper produced. Addition to the additive system should be made directly at the rate of 0.004 to 3.32 lb(0.48 to 400 ppm) per 1000 gallons. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add this product at the rate of 0.0008 to 0.4 lb per ton of pulp or paper produced. Treat the system as needed to maintain control. Addition of this product to the additive system may be reduced to 0.004 to 1.68lb (0.48 to 200 ppm) per 1000 gallons.

Continuous Feed Method - Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.0008 to 0.4 lb per ton of pulp of paper produced. Additions of this product to the additive system should be made directly at the rate of 0.004 to 2.52 lb (0.48 to 300 ppm) per 1000 gallons. Continue until control is achieved. Subsequent Dose: Maintain by continuous feed of this product at the rate of 0.0008 to 0.4 lb per ton of pulp and paper produced.

Mold Inhibition In Paper And Paperboard

This product is used to inhibit fungal growth which causes discoloration, odor and degradation in paper and paperboard. This product may be applied to the white water or stock at a rate of 0.02 to 3.4 lb per ton of dry fiber produced. For inhibition of wet lap or sheet pulp, this product should be applied to the dewatered pulp surfaces via applicator rolls or shower at 0.02 to 3.4 lb per ton of dry fiber produced. Application can also be made at the size press or water box. Application is made at the rate of 80 to 8,000 ppm of this product in the solution applied to the paper sheet.

Preservation In Paper Plant Storage

This product should be added directly to the material to be preserved prior to manufacturing into the finished product, i.e., pulp, alum, broke, polymers, defoamers, emulsions, adhesives, paper mill coating, pigment and slurries. The dosage rate will depend upon the material to be preserved and the storage time. The usual additions should be 0.2 ppm for storage of microbial resistant materials up to 250 ppm for less resistant materials. Under extreme conditions of spoilage the dosage rate should be increased to 4 to 400 ppm. The above recommendations are based on a maximum storage time of two weeks.

Use With Nitrocellulose

AMICAL 48 is an effective antifungal agent for use in nitrocellulose wet with water for purposes of storage and shipment. Add 0.05 to 0.3% by weight of AMICAL 48 based upon the wet weight of nitrocellulose. AMICAL 48 should be added to the nitrocellulose only by the manufacturer as the last ingredient.