

464-673

1-14-2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

January 14, 2003

Allen F. Bollmeier  
Regulatory Specialist  
The Dow Chemical Company  
1803 Building  
Midland, MI 48674

Subject: AMICAL Flowable  
EPA Registration No. 464-673  
Application Date: November 13, 2002  
EPA Received Date: November 18, 2002

Dear Mr. Bollmeier:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below.

**Proposed Amendment**

- Revised First Aid Statements per PR Notice 2001-1

**Conditions**

Revise the label as follows:

1. Active and inert ingredients must be expressed in percentage by weight. Therefore, include the percentage (%) sign and revise the ingredient statement to read "40.0%" and "60.0%".
2. Revise the Precautionary Statements to read:

**PRECAUTIONARY STATEMENTS**

DANGER. Corrosive. Causes irreversible eye damage. Harmful if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

SYMBOL	7510C	Remove contaminated clothing and wash clothing before reuse.					
SURNAME	S. Gray						
DATE	1-14-03						

- 3. Revise the "If Swallowed" section of the First Aid Statements to read:

**If swallowed:** 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.*

- 4. Revise the First Aid Statements by including the following statement "Have the product container or label with you when calling a poison control center or doctor, or going for treatment." This statement can be located at the beginning or end of the First Aid section.

- 5. Since this product has a Toxicity Category I for eye irritation, revise the "Pesticide Disposal" section to read as follows:

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

- 6. Revise the "Container Disposal" section to read as follows:

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then *offer for recycling or reconditioning*, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

To dispose of fiber drum containers, you must completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in 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.

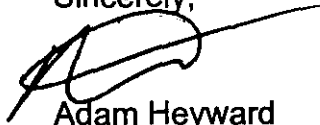
- 7. Revise the "Use in Paints" directions statement "...while 2.5 - 7.5 lb AMICAL Flowable at 0.00375% to 0.75% to slurried coating." to read "...while 2.5 - 7.5 lb AMICAL Flowable per 100 gallons are sufficient for less severe conditions. For mildew control on fire-retardant coating add AMICAL Flowable at 0.00375% to 0.75% to slurried coating." as worded on your last stamped label, dated August 30, 1996.

**General Comments**

A stamped copy of the labeling accepted with conditions is enclosed. Submit one(1) copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact me at 703-308-6422.

Sincerely,



Adam Heyward  
 Product Manager 34  
 Regulatory Management Branch II  
 Antimicrobials Division (7510 C)

# AMICAL™ FLOWABLE

## ACTIVE INGREDIENT\* :

Diiodomethyl p-tolyl sulfone. . . . . 40.0(w/w)

INERT INGREDIENTS: . . . . . 60.0(w/w)

\*1 gallon provides 4.4 lb active ingredient)

EPA Reg. No. 484-673

EPA EST. No. 37429-GA-2

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

## PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

**CORROSIVE - CAUSES IRREVERSIBLE EYE DAMAGE**

Do Not Get In Eyes, On Skin Or 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 Clothing Before Reuse - Wear Goggles, Face Shield, or Safety Glasses

## 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.

## FIRST AID:

**If in eyes:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

**If swallowed:** Call a poison control center or doctor immediately or treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center.

**If on skin:** Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment.

**If inhaled:** Move person to fresh air. If person is not breathing, Call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment.

**Note to physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

**IN CASE OF AN EMERGENCY** endangering life or property involving this product, call 1-800-424-9300.

## 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. Protect from freezing.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent), then puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## DIRECTIONS FOR USE

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

### USE IN PAINTS

AMICAL Flowable is an effective mildewcide and algicide for exterior and interior latex paint, solvent-based paints, fire-retardant insulation coating, and air duct coatings. Use levels in paint and duct coating will vary depending upon the formulation and severity of field conditions. Generally AMICAL Flowable will impart protection when used at levels of 4.0-12.5 lb AMICAL Flowable per 100 gallons of paint for severe conditions while 2.5-7.5 lb AMICAL Flowable at 0.00375% to 0.75% to slurred coating. AMICAL Flowable can be added at any state of the manufacturing process, at the point of retail purchase, or by the end user. After addition of AMICAL Flowable the formulation should be mixed for maximum dispersion of the AMICAL Flowable.

For 0.5 oz. 20 oz. 75 oz by weight packages: Add 0.37 fl oz (0.5 oz av.) of AMICAL Flowable to each gallon of paint or stain. Use paint or stain as directed.

For 2.5 oz av. package: Add contents of package (2.5 oz of AMICAL Flowable) to 5 gallons of paint or stain. Use paint or stain as directed.

### USE IN PIGMENT DISPERSIONS, INKS, EMULSIONS AND EXTENDER SLURRIES

To inhibit the growth of spoilage fungi during storage of water-based suspensions and dispersions. AMICAL Flowable will impart protection when dosed at 0.05-0.375% (w/w). Add AMICAL Flowable at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added.

### USE IN CAULKS AND ADHESIVES

AMICAL Flowable is recommended for use in adhesives and binders, e.g., joint compounds, tile mastic, wallpaper paste, carpet backing, air flairs and full 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 0.025-0.72% AMICAL Flowable at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added. AMICAL Flowable also can be added by the end-user at a point of use of the adhesive. Add 0.044-0.176 fl oz (0.06-0.24 oz av.) directly to each gallon of adhesive paste or to each gallon of paste activator.

### USE IN WOOD-PRESERVATION - (FOR ABOVE GROUND USE ONLY)

AMICAL Flowable can be used for control of mildew, sapstain, and wood-rotting organisms at wood treatment facilities or incorporated into other registered wood preservatives. For typical end users such as building lumber, furniture, frames, fences, decking, shingles and siding, logs and poles, add AMICAL Flowable to the water based treatment solution with constant agitation for optimum results. Concentration of 0.3-1.0% (w.w active ingredient) are recommended.

For dip treatments, submerge for a minimum of one minute. Spray applications should use at least 0.5% (w/w a.l.) concentration AMICAL Flowable. Spray to run-off if intermittent spraying. For pressure treatment, retention levels of 0.05-1.0 lb per ft are recommended.

AMICAL Flowable can be used with other wood preservatives such as chromated copper arsenate (CCA), quaternary ammonium compounds, borates, tributyltin compounds, and zinc and copper salts at levels of 25-5000 ppm. In cases where AMICAL Flowable is incorporated into a formulated wood preservative, follow label directions for the finished product. Do not use treated wood where there is direct contact with food, feed potable water, livestock, or dairy animals or for surfaces likely to have repeated or prolonged skin contact. Uses where there will be direct contact with plants are not recommended.

### USE IN LEATHER TANNING

AMICAL Flowable 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 0.02-0.03%, for sheep hides (based on drained pickle weight) 0.08-0.11%, and for goat and small skins use levels should be calculated on the dry basis of the skin weight, assuming lined weight to be 20% dry basis and pickled weight to be 33% dry basis. when long hold or export protection is required, use 0.03-0.66% for cattle, 0.11-0.17% 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 0.15-0.45 % (on wet blue weight). In all applications, add the dry AMICAL Flowable through the drum door. This should be done just prior to chrome addition, or together with the formate. In the case of retan/color/fatliquor, add AMICAL Flowable prior to the prime fatliquor feed.

### 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 1.25-12.5 lb AMICAL Flowable per 100 lb of dry fabric (1250-12,500 ppm) is needed. AMICAL Flowable is best added together with the water-repellent emulsion or dye to ensure durability.

ACCEPTED  
with COMMENTS  
EPA Letter Dated:

JAN 14 2003

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No. 464-673

### USE IN PAPER PRODUCTION

This product aids in the control of objectionable fungi in pulp, mills and the additive system and for the preservation of pulp slurries, alum, emulsions, adhesives, defoamers, polymers a products. This product is used to inhibit fungal growth which discoloration, odor and degradation in paper and paperboard. 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 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 0.0019 to 1.9 ton of pulp, or paper produced. Addition to the additive system be made directly at the rate of 0.0096 to 7.97 lb (0.48 to 400 lb 1000 gallons. Repeat until control is achieved. **Subsequent:** When microbial control is evident, add this product at the rate 0.0019 to 0.96 lb per ton of pulp or paper produced. Treat the as needed to maintain control. Addition of this product to the system may be reduced to 0.0096 - 4.03 lb (0.48 to 200 ppm) gallons.

**Continuous Feed Method - Initial Dose:** When the system is noticeably fouled, add this product at the rate of 0.0019 to 1.0 ton of pulp of paper produced. Additions of this product to the system should be made directly at the rate of 0.0096 to 6.05 lb (0.48 to 300 ppm) per 1000 gallons. Continuous until control is achieved. **Subsequent Dose:** Maintain by continuous feed of this product rate of 0.0019 to 1.0 lb per ton of pulp and paper product.

### MOLD INHIBITION IN PAPER AND PAPERBOARD

This product is used to inhibit fungal growth which causes discoloration, odor and degradation in paper and paperboard. product may be applied to the white water or stock at a rate of 0.048-8.18 lb per ton of dry fiber produced. For inhibition of white sheet pulp, this product should be applied to the dewatered surfaces via applicator rolls or shower at 0.048-8.18 lb per ton fiber produced. Application can also be made at the size press water box. Application is made at the rate of 200 to 20,000 ppm 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, 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 are 0.2 ppm active for storage of microbial resistant materials up to ppm active for less resistant materials. Under extreme conditions the dosage rate should be increased to 4 to 400 ppm. above recommendations are based on a maximum storage time of weeks.

### USE IN METALWORKING FLUIDS

AMICAL Flowable is recommended for use in metalworking fluids to prevent fungal growth. The level of AMICAL Flowable to be incorporated into metalworking fluid concentrate will vary depending upon the dilution factor recommended by the manufacturer. For efficient fungistatic activity, a concentration 240-7200 ppm AMICAL Flowable in the diluted fluid is suggested.

### PRESERVATIVE FOR FORMULATIONS FOR DRAIN, GREASE AND SEPTIC SYSTEM MAINTENANCE

To inhibit fungal contamination in formulations used in the maintenance of drain lines, grease traps and septic systems. AMICAL Flowable should be dosed at 125-1000 ppm based on final formulation volume.



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

1-800-258-CHEM

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