

AMICAL™ Flowable Antimicrobial

ACTIVE INGREDIENT* :

Diiodomethyl p-tolyl sulfone 40.0(w/w)

INERT INGREDIENTS: 60.0(w/w)

TOTAL 100%

*(1 gallon provides 4.4 lb active ingredient)

EPA Reg. No. 464-673

EPA EST. No. 37429-GA-2

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

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 · Remove Contaminated Clothing and Wash Clothing Before Reuse

Produced for:



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

(989)636-4400

™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Made in U.S.A.

76916-1-1/3/2007-1849

FIRST AID:	
IF IN EYES:	<ul style="list-style-type: none"> 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. Call a poison control center or doctor for 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN:	<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.
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 mouth to mouth, if possible. Call a poison control center or doctor for further treatment.

HOT LINE NUMBER

IN CASE OF AN EMERGENCY endangering life or property involving this product, call 1-800-424-9293 label with you when calling a poison control center or doctor or going for treatment.

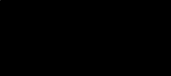
NOTE TO PHYSICIAN: Probable mucosal damage may preclude the use of

<p>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.</p> <p>STORAGE AND DISPOSAL Do not contaminate water, food, or feed by storage or disposal. STORAGE: Store in a dry area. Keep container closed when not in use.</p> <p>PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinseate 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.</p> <p>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.</p> <p>DIRECTIONS FOR USE It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.</p>	<p>USE IN PAINTS AMICAL Flowable Antimicrobial is a fire-retardant insulating paint and duct coating. The severity of field conditions while 2.5-100 gallons are sufficient control on fire-retardant Agent per 100 gallon mildew control on fire Antimicrobial Agent is AMICAL Flowable Antimicrobial. After additional formulation should be Flowable Antimicrobial. For 0.5 oz. 20 oz. 75 av.) of AMICAL Flow stain. Use paint or stain as directed. For 2.5 oz av. packag Flowable Antimicrobial or stain as directed.</p> <p>USE IN PIGMENT DISPERSIONS To inhibit the growth suspensions and dispersions will impart protection Flowable Antimicrobial where sufficient mixture other ingredients are</p>
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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 by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN:	<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.
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, preferable mouth to mouth, if possible. • Call a poison control center or doctor for further treatment.
HOT LINE NUMBER	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
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.

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

STORAGE: Store in a dry area. Keep container closed when not in use.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinseate 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.

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 its labeling.

USE IN PAINTS
AMICAL Flowable Antimicrobial Agent 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 Antimicrobial Agent will impart protection when used at levels of 4.0-12.5 lb AMICAL Flowable Antimicrobial Agent per 100 gallons of paint for severe conditions while 2.5-7.5 lb AMICAL Flowable Antimicrobial Agent per 100 gallons are sufficient for less severe conditions. For mildew control on fire-retardant coating add AMICAL Flowable Antimicrobial Agent per 100 gallons are sufficient for less severe conditions. For mildew control on fire retardant coating add AMICAL Flowable Antimicrobial Agent at 0.00375% to 0.75% to slurred coating. AMICAL Flowable Antimicrobial Agent 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 Antimicrobial Agent, the formulation should be mixed for maximum dispersion of the AMICAL Flowable Antimicrobial Agent.

For 0.5 oz, 20 oz, 75 oz by weight packages: Add 0.37 fl oz (0.5 oz av.) of AMICAL Flowable Antimicrobial Agent 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 Antimicrobial Agent) 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 Antimicrobial Agent will impart protection when dosed at 0.05-0.375% (w/w). Add AMICAL Flowable Antimicrobial Agent at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added.

USE IN CAULKES
AMICAL Flowable adhesives and bi wallpaper paste, laminate; and sea applied or stored growth add 0.025-point in the produ good suspension AMICAL Flowable end-user at a poir (0.06-0.24 oz av.) each gallon of pa

USE IN WOOD-PI ONLY)

AMICAL Flowable mildew, sapstain, facilities or incorp For typical end us fences, decking, Flowable Antimicr with constant agit 0.3-1.0% (w.w act treatments, submi applications shoul AMICAL Flowable intermittent sprayi 0.05-1.0 lb pcf are Agent can be use chromated copper compounds, borat salts at levels of 2 Antimicrobial Agei preservative, follo use treated wood potable water, livr have repeated or direct contact with

USE IN LEATHER

AMICAL Flowable or vegetable tann wet processing ar long transportatio cattle hides (base sheep hides (base goat and small sk basis of the skin v and pickled weigh protection is requi sheep and on goe normal protection. retain/color/fatliquc types are 0.15-0.4 the dry AMICAL F This should be do the formate. In th Flowable Antimicr

USE IN TEXTILES

To prevent mildew cordage, drapes f upon the expecte general 1.25-12.5 lb of dry fabric (12 Antimicrobial Agei emulsion or dye t

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USE IN CAULKS AND ADHESIVES

AMICAL Flowable Antimicrobial Agent is recommended for use in adhesives and binders, e.g., joint compounds, tile mastics, wallpaper paste, carpet backing, air filers and fail 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 Antimicrobial Agent at a point in the production process where sufficient mixing will assure good suspension of the material as other ingredients are added. AMICAL Flowable Antimicrobial Agent 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 Antimicrobial Agent can be used for control of mildew, sapstain, and wood-rotting organisms at wood treatment facilities or incorporated into other registered wood preservations. For typical end users such as building lumber, furniture, frames, fences, decking, shingles and siding, logs and poles, add AMICAL Flowable Antimicrobial Agent 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.i.) concentration AMICAL Flowable Antimicrobial Agent. Spray to run-off it intermittent spraying. For pressure treatment, retention levels of 0.05-1.0 lb pcf are recommended. AMICAL Flowable Antimicrobial Agent 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 Antimicrobial Agent 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 Antimicrobial Agent 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 firmed 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 Antimicrobial Agent 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 Antimicrobial Agent 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 Antimicrobial Agent per 1000 lb of dry fabric (1250-12,500 ppm) is needed. AMICAL Flowable Antimicrobial Agent 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 0.0019 to 1.92 lb per ton of pulp, or paper produced. Addition to the additive system should be made directly at the rate of 0.0096 to 7.97 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 0.0019 to 0.96 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 0.0096 - 4.03 lb (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 0.0019 to 1.0 lb per ton of pulp or paper produced. Additions of this product to the additive system should be made directly at the rate of 0.0096 to 6.05 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 0.0019 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. This product may be applied to the white water or stock. The final paper should contain 0.54-8.21 lb of AMICAL Flowable Antimicrobial Agent 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 0.048 - 8.16 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 200 to 20,000 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 active for storage of microbial resistant materials up to 250 ppm active 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 IN METALWORKING FLUIDS

AMICAL Flowable Antimicrobial Agent is recommended for use in metalworking fluids and lubricants to prevent fungal growth. The level of AMICAL Flowable Antimicrobial Agent 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 of AMICAL Flowable Antimicrobial Agent in the diluted fluid is suggested.

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

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

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