



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 16, 2016

Ms. Alexis Chapman
Dow Microbial Control
The Dow Chemical Company
200 Larkin Center
Midland, MI 48671

Subject: Amended Reregistration Label
Product Name: Amical™ 48
EPA Registration Number: 464-670
Decision Number: 428669

Dear Ms. Chapman:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the reregistration of the above referenced product in connection with the AMICAL RED, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

NOTE: This product is **not** yet being reregistered under section 4(g) of FIFRA.

Please note that the record for this product currently contains the Confidential Statements of Formulation (CSFs) listed below. Any previously dated CSFs are superseded.

- Basic CSF, dated 6/1/2012

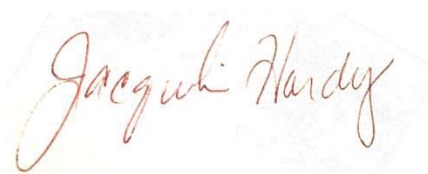
Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment or the next printing of the label, whichever occurs first, must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions about this letter, please contact Jacqueline Hardy by phone at (703) 208-6416, or via email at hardy.jacqueline@epa.gov.

Sincerely,

A handwritten signature in red ink that reads "Jacqueline Hardy". The signature is written in a cursive style and is centered on the page.

Jacqueline Hardy, Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

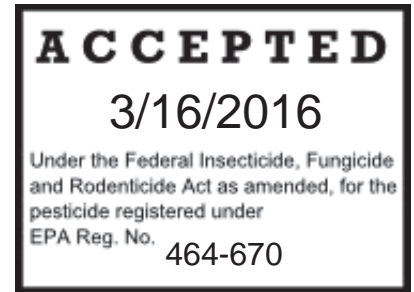
Enclosure: Stamped Label

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AMICAL™ 48

ACTIVE INGREDIENTS:

Diiodomethyl-p-tolyl sulfone.....	95%
Other Ingredients	5%
Total	100%



E.P.A. Registration No. 464-670

E.P.A. Est. XXXX-XX-X

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">• Hold eyes open and rinse slowly and gently with water for 30 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 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 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.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance and then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (989) 636-4400 . Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Maintain adequate ventilation and oxygenation of the patient. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably with an ophthalmologist. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.	

KEEP OUT OF REACH OF CHILDREN

DANGER- PELIGRO

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF ABSORBED THROUGH THE SKIN. HARMFUL IF INHALED. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Wear protective eyewear (goggles, face shield or safety

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glasses). Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks and shoes
- Chemical resistant gloves (such as or made out of any waterproof material)
- Protective eyewear (goggles or face shield or safety glasses)

Occupational handlers must wear chemical resistant gloves while handling diiodomethyl p-tolyl sulfone.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, ponds, streams, 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. Antisapstain treated lumber must be stored under cover, indoors, or at least 100 feet from any pond, lake, stream, wetland, or river to prevent possible runoff of the product into the waterway. Treated lumber stored within 100 feet of a pond, lake, stream, or river must be either covered with plastic or surrounded by a berm to prevent surface water runoff into nearby waterway. If a berm or curb is used around the site, it should consist of impermeable materials (clay, asphalt, concrete) and be of sufficient height to prevent runoff during heavy rainfall events.

STORAGE AND DISPOSAL

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

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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 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.

CONTAINER DISPOSAL:

Nonrefillable Container: Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mix tank. Triple rinse drum liner and remove liner and dispose of liner in a sanitary landfill, or by incineration, or, if allowed by state and local authorities by burning. If burned, stay out of smoke. Then offer drum for recycling if available. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

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 coating. Use levels in paints and duct coatings will vary depending upon the formulation and expected severity of field conditions.

For roll coat applications only: AMICAL 48 will impart protection when used at levels of 1.6-5 lb AMICAL 48 per 100 gallons of paint for severe conditions, while 1-3 lb AMICAL 48 per 100 gallons of paint is sufficient for less severe conditions. For all other paint applications methods, including airless sprayer and brush/roller application: The maximum allowable concentration is 2.5 lb AMICAL 48 per 100 gallons of paint.

AMICAL 48 must be added during the last few minutes of the pigment grind for maximum dispersion. For mildew control of fire-retardant coating add AMICAL 48 at 0.0015 to 0.3% at a point in the production process to ensure sufficient mixing with other dry ingredients.

USE IN PIGMENT DISPERSIONS, INKS, EMULSIONS AND EXTENDER SLURRIES

Product Not Registered For This Use In California- Optional

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 for use in adhesives and binders, e.g. joint compounds, tile mastics, wallpaper paste, carpet backing, air filters and foil crimp Kraft laminate; and sealants and caulks where mildew growth on the applied or stored product may be a problem. For control of mildew add

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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

For use in leather tanning drum only.

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 weights 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 must 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 the normal protection directions. Use rate range 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 must 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)

Do not apply this product to any structure, or use any wood treated with this product in or above water or within 100 feet of any surface water or wetland area. Wood treated with diiodomethyl p-tolyl sulfone shall not be used in the construction of beehives.

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 0.3-0.8% (w/w/ active ingredient). Solvent-based systems containing mineral spirits require suitable co-solvent for the incorporation of AMICAL 48 into the system. Formulators are responsible for obtaining EPA registration of formulated products.

USE IN RUBBER AND PLASTIC PRODUCTS

Treated plastics cannot be used to manufacture children's toys.

AMICAL 48 is for PVC, polyurethane, rubber, thermoplastic rubber, and other polymeric based products, coating, adhesives, foams, and sealants requiring protection against microbial deterioration. For control of microbial deterioration, use 0.1-0.8% AMICAL 48 based on the 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-backing, cordage, drapes, filters, and shower curtains. Use only to treat carpet-backing. Not for use in carpet fibers. 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 dry fabric (500-5000 ppm) is needed. AMICAL 48 is best added together with the water-repellent emulsion or dye to ensure durability.

USE IN PAPER PRODUCTION

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Product Not Registered For This Use In California- Optional

This product aids in the control of objectionable fungi in pulp, paper mills, and the additive system 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 must 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 0.004-1.68 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 0.0008-0.4 lb per ton of pulp or paper produced. Additions of this product to the additive system must 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 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 at the rate of 0.02 to 3.4 lb per ton of dry fiber produced. For inhibition of wet lap or sheet pulp this product must 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 8000 ppm of this product in the solution applied to the paper sheet.

PRESERVATION IN PAPER PLANT STORAGE

Product Not Registered For This Use In California- Optional

This product must 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 must be 0.2 ppm for storage of microbial resistant materials up to 250 ppm active for less resistant materials. Under extreme conditions of spoilage the dosage rate must be increased to 4 to 400 ppm. The above directions are based on a maximum storage time of two weeks.

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Notice: Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.

NET WT:

LOT:

Produced for:

THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 USA

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