

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF
PREVENTION, PESTICI:
AND TOXIC SUBSTANCE

September 9, 2008

Abigail Trueblood **The Dow Chemical Company**1500 E. Lake Cook Road

Buffalo Grove, IL 60089

Subject:

FILMGUARD™IPBC 100 Fungicidal Agent

EPA Registration No.: 464-8123 Application Date: August 26, 2008 Receipt Date: September 3, 2008

Dear Ms. Trueblood:

The label amendment submitted in connection with registration under sections of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is acceptable. A stamped copy is enclosed for your record.

Should you have any questions concerning this letter, you may contact me by telephone at (703) 308-6422 or by e-mail at heyward.adam@epamail.epa.gov or Stacey Grigsby by telephone at (703) 305-6440 or by email at grigsby.stacey@epamail.epa.gov during the hours of 8:00 am to 4:00 pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Singerely,

Adam Heyward

Product Manager (34)

Regulatory Management Branch II Antimicrobials Division (7510P)

FILMGUARDTM IPBC 100 FUNGICIDAL AGENT

For industrial use only as a preservative for aqueous compositions including, adhesives, aqueous metalworking fluids, adhesives cordage, textiles, inks, paints and stains, plastics, paper coating, wood preservation

ACTIVE INGREDIENT

E.P.A. Registration No. 464-8123 E.P.A. Est.

ACCEPTED with COMMENTS EPA Letter Dated:

SEP - 9 2008

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 464-8123

KEEP OUT OF REACH OF CHILDREN

DANGER- PELIGRO

	FIRST AID
TE DWILLED	The state of the s
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 advice
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING	Rinse skin immediately with plenty of water for 15-20 minutes
	Call a poison control center or doctor for treatment advice
IF IN EYES	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 SWALLOWED	Call a poison control center or doctor immediately for treatment
	advice.
	Have affected 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.
Have the product container or label with you when calling a poison control center or doctor, or going for	
treatment.	
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.	
Exposure to high concentrations via inhalation may result in the inhibition of acetylchlolinesserate and	
produce related symptoms.	
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Produced for:

THE DOW CHEMICAL COMPANY Midland, Michigan 48674 USA (989)636-4400 NET WEIGHT:

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER-PELIGRO

CORROSIVE. Causes skin burns and irreversible eye damage. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled or adsorbed through the skin. Avoid breathing vapor or spray mist. Wear goggles or face shield, protective clothing, chemical-resistant (such as nitrile or butyl) gloves. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public 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 & DISPOSAL

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

Pesticide Storage: Keep container tightly closed when not in use. Store in a cool place. Do not store with strong oxidizing agents or strong (concentrated acids).

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, pesticide spray 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: Do not reuse empty container. Triple rinse (or equivalent) and 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.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This formulation is not cleared by the Federal Food, Drug and Cosmetic Act for use in manufactured food grade adhesive, paper and paper board products and paper coating.

Dry Film Paint Preservative

FILMGUARD IPBC 100 Fungicidal Agent inhibits the growth of mildew in solvent-based paints and waterborne paints, stains and latex emulsions. For best results, it should be solubilized in a suitable solvent prior to adding to the paint. Addition should be at the end of the manufacturing process and allowed to mix long enough to be adequately dispersed. Typical levels for protection against mildew on painted surfaces are 0.1-0.5% by weight on wet paint. For example, house paint with a wet density of 10 lbs. per gallon would use 1-5 lbs. of this product per 100 gallons of wet paint. Where the climate is severe and mildew growth is a major problem for painted surfaces, more would be required, as much as 0.8% by weight in the paint.

Aqueous Metalworking, Cutting, Cooling & Lubricating Concentrates

To inhibit the growth of fungi in aqueous metalworking, cutting, cooling and lubricating concentrates, add an amount that will give up to 1,000 ppm in the diluted fluid. The amount required in the concentrate will depend on the end use dilution. For example, if the desired level of this product in the diluted fluid is 100 ppm, and the end use dilution of the fluid is 5%, then a 0.2% concentration of this product is required in the concentrate (100 ppm/0.05=2,000 ppm or 0.2%).

Aqueous Metalworking, Cutting, Cooling & Lubricating Fluids

To inhibit the growth of fungi in aqueous metalworking, cutting, cooling and lubricating fluids add up to 1000 ppm (0.1% w/w/ of this product to the diluted fluid (1.0 lbs. per 1000 lbs of solution or approximately 0.8 lbs. per 100 gallons of solutions or 1.0 kg per 1000 kg). This product may be added to the fluid at the time it is prepared (diluted) or to the reservoir (sump) containing the fluid after it is put into use. If it is added to the reservoir, the fluid should be circulated after addition to ensure mixing.

Fungicide in Non-medical, Non-food Contact Aqueous, Solvent and Non-solvent Based Systems Such as Natural and Synthetic Adhesives, Caulks, Patching Compounds, Sealants, Grouts, Latexes Such as SBR/Latex Used in the Manufacture of Flooring Adhesives or Carpet Backings

FILMGUARD IPBC 100 Fungicidal Agent can be used as an additive to non-medical, non-food use natural and synthetic adhesives, caulks, patching compounds, sealants, grouts, latexes such as SBR/latex flooring adhesives or carpet backings to prevent the growth of fungi, molds and mildews in the material both in the wet state and in the dry film of the finished product. Recommended use levels are between 0.02-0.25% wet formulation weight. FILMGUARD IPBC 100 Fungicidal Agent should be added toward

the end of the production cycle with good agitation to ensure uniform distribution. For a example, to inhibit the growth of mildew on a latex-based wall cover adhesive for a non-food area, add 0.2% (2 lbs. of FILMGUARD IPBC 100 Fungicidal Agent per 1000 lbs. of latex-based adhesive formulation) of this product to the latex-based formulation.

Plastics and Plastic Coatings

FILMGUARD IPBC 100 Fungicidal Agent may be used to prevent surface mildew growth on plastic items, such as shower curtains, cable and wire insulation, sun umbrellas, polymer furniture, filter medias, polymer components of carpet etc. Intended plastics include polymers such as PVC, polyurethanes, elastomers and rubbers, neoprene, styrene compounds, polyolefins, etc. Use levels of 0.05-1.0% by weight of the plastic are generally adequate. This product should be dispersed in the plasticizer or color concentrate before it is incorporated into the resin to ensure a uniform distribution. Use of this product is not recommended if the heat of processing is above 350° F for prolonged periods, not should it be used in a plastic that will be in contact with food or in medical device applications. For example, to inhibit growth on a plastic such as polyurethane boat cushions intended for a non-food area add 0.5% (5 lbs. FILMGUARD IPBC 100 Fungicidal Agent per 1000 lbs. of polyurethane formulation) of this product to the polyurethane formulation.

Paper Coatings

FILMGUARD IPBC 100 Fungicidal Agent may be used as a mildewcide in both aqueous and solvent-based coatings which are applied to paper and cardboard substrates. This product can be used to prevent mold and mildew from growing in products such as corrugated cardboard or soap wrappers, wall covers, non-food contact packaging materials, and non-food contact paper tapes. Use levels of this product range from 0.02-0.75% of this product by weight. This product should be added at the end of the production cycle and with good agitation to prevent possible mechanical losses and to ensure uniform distribution. As an example, to inhibit the growth of mildew on corrugated cardboard intended for non-food packaging, add 0.5% (5 lbs. FILMGUARD IPBC 100 Fungicidal Agent per 1000 lbs. coating material) of this product to the coating material formulation.

Cordage

FILMGUARD IPBC 100 Fungicidal Agent may be used as a mildewcide in both aqueous and solvent based process formulations which coat cordage. Typical use levels of this product will range from 0.02-1% of the process formulations used in the process of these cordages. This product should be added to the process formulation at the end of the production cycle with good agitation to prevent possible mechanical losses and to ensure a uniform distribution. As an example, to inhibit the growth of mildew on cordage intended for a non-food area, add 0.5% (5 lbs FILMGUARD IPBC 100 Fungicidal Agent per 1000 lbs. of process formulation) of this product to the process formulation.

Textiles

FILMGUARD IPBC 100 Fungicidal Agent may be used as a mildewcide applied in both aqueous and solvent-based coatings or dyes which are typical to the textile material processing. Typical end use applications of these materials may include carpet fibers and backings, canvas and cordage, drapes and shower curtains. Not to be used in fabrics intended for human wear or direct skin contact. The product should be solubilized or stirred in the dye bath or polymer coating pan to minimize mechanical losses and ensure a uniform distribution of the product. Use levels in the range of 0.02-1% by weight of the total processing formulation are typically adequate to prevent fungal growth. For example, to inhibit the growth of mildew on cotton canvas intended for a non-food area add 0.5% (5 lbs FILMGUARD IPBC 100 Fungicidal Agent per 1000 lbs dye bath) of this product to the dye bath formulation

Inks

FILMGUARD IPBC 100 Fungicidal Agent may be used in aqueous-based ink solutions for protection of these solutions against attack by fungal organisms. It is recommended that this product will be added at the end of the production cycle with good agitation. This product will generally impart protection when used at levels of 0.05-3.0% of active ingredient based on the formula weight.

Wood Preservation

FILMGUARD IPBC 100 Fungicidal Agent is a white powder, non-metallic compound designed as a wood preservative for use in above ground applications. All recommendations of use levels are in percentage by weight and refer to this product. Dosage ranges are given for the various applications to indicate the approximate levels for a particular application. Exact levels of use should be determined by field trials.

For best results this product should be solubilized in a suitable solvent or made into an aqueous dispersion and then applied to new lumber, plywood, particle board, millwork, etc., to prevent the growth of mildew, sapstain and wood rot on these substrates. This product is recommended for use on wood in above ground use only.

Treating solutions may be prepared by dissolving this product in alcohols or aromatic solvents or by dispersion in water. Levels of 0.10-1.5% of this product are suggested depending upon the severity of conditions for end use, and the extent of time that protection is required.

For freshly sawn lumber, a concentration of 0.2% of this product is suggested as a starting level. A one minute dip at ambient temperatures in a solution or aqueous dispersion containing 0.2% of this product should be adequate to control the development of mildew and sapstain organisms on the lumber. Because of the great variation in susceptibility of fresh sawn lumber relating to the type of wood, sawing and storage techniques, conditions of humidity, method of treatment, etc. it is usually necessary to

carry out field tests to determine the most appropriate means of application and the optimum concentration of this product to be used.

For best results lumber should be treated within twenty-four hours after it is sawed. The lumber should be completely immersed in the treating bath, and the treating vat designed to permit easy immersion and removal, and to minimize spillage. The vat may be cleaned by emptying and rinsing with a suitable solvent or by use of a detergent solution. To additional product while treating, first prepare the proper solution or emulsion in a separate container (of wood, plastic or stainless steel construction) and add to the treating vessel.

After treatment lumber should be stacked in a properly maintained seasoning yard with good drainage so that no water will accumulate in any area. The yard should be kept free from weeds and vegetation, which may hold moisture and promote growth of decay and stain producing fungi. All debris and lumber scraps should be removed from the area. A properly laid out yard should take advantage of prevailing winds to permit good air circulation. Main alleys should be at least 16 feet wide. Stack foundations should be sufficiently elevated to permit ready access of air to the pile and allow water to drain off quickly.

Millwork

This product is also recommended for use in millwork, including door and window frames, exterior siding, composite board, plywood and other construction lumber when it is important to prevent the growth of mildew, sapstain and wood rot organisms on these materials. Wood treated with this product does not change in appearance and may be painted when dry. For applications of this type, this product may be applied by dipping, brushing, spraying, or pressure treatment. Levels of 0.15% may be used for mildew control.

To control rot and decay, do not use less than 0.2% as a concentration. Use this product in solution in a suitable solvent. Concentrations up to 1.0% are recommended depending upon the condition of the wood, the nature of the intended exposure, and the length of protection desired.

When brushing a single coat will usually suffice if the solution is applied liberally. This also pertains to spraying. Use of this product is not recommended for wood surfaces which may come in contact with food. Surfaces which may be in continuous contact with skin should be coated with a varnish, or lacquer after treatment with this product. This product may also be used as an additive to stains to be applied to such materials as exterior siding, decks, lawn furniture etc. in order to prevent the growth of fungal organisms. It is recommended that levels between 0.2-1% of this product by weight of this product by weight of the final formulation be added to these materials.

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 WARRANTIESMADE IN THIS PARAGRAPH ARE SELLER'S SOLE

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