

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. DOWICIL 150 Antimicrobial meets the requirements of Food Additive Regulations 21 CFR 175.105 for use as a preservative in adhesives, 21 CFR 176.1680 for preservation of polyurethane resins in contact with dry bulk foods, 21 CFR 176.170 for preservation of components of paper and paperboard intended for use in contact with aqueous and fatty foods, and 21 CFR 176.180 for preservation of components of paper and paperboard intended for use in contact with dry foods.

DOWICIL 150 may be used as a preservative inert ingredient in water-based formulations which do not come in contact with food, food crops, feedstuffs, and water supplies, and which are not applied to humans or food producing animals, in concentrations not to exceed 0.14% by weight of the total formulation.

DETERGENTS

To prevent bacterial deterioration during storage and to increase the shelf life of biodegradable surfactants, add 0.03-0.1% DOWICIL 150 Antimicrobial by wt of the formulation. Add as an aqueous solution.

FLOOR WAX EMULSIONS AND FLOOR POLISHES

To preserve water based waxes and polishes during storage, add 0.05-0.15% DOWICIL 150 Antimicrobial by wt of the formulation. Add as an aqueous solution.

ADHESIVES

To prevent pH drop, odor, gas formation, change in viscosity, and loss of adhesive strength during manufacture, storage, and service, add 0.05-0.5% DOWICIL 150 Antimicrobial by wt to the formulation. Add as a concentrated aqueous solution.

For use in the following types of adhesives:

Starch Based (corn, tapioca, sago, potato, etc.)

Add 0.1-0.2% DOWICIL 150 by wt as a concentrated aqueous solution.

Protein-Derived (animal gases such as hide, bone, fish, blood, and gelatin)

Add 0.1-0.5% DOWICIL 150 by wt as a concentrated aqueous solution.

Natural Gums (arabic, guar, and tragacanth)

Add 0.05-0.2% DOWICIL 150 by wt as a concentrated aqueous solution. Highly concentrated gums do not readily support bacterial or fungal growth; consequently, higher concentrations of DOWICIL 150 are required in the less concentrated gum solutions.

Natural Rubber Latex

Add 0.05-0.15% DOWICIL 150 by wt as a concentrated aqueous solution.

Polyvinyl Acetate Emulsions

Add 0.05-0.15% DOWICIL 150 by wt as a concentrated aqueous solution.

Synthetic Gums (e.g. METHOCCEL* methylcellulose gums) and Other Synthetic-Based Adhesives

Add 0.05-0.15% DOWICIL 150 by wt as a concentrated aqueous solution.

*Synthetic adhesive formulations sometimes incorporate natural substances such as starches or proteinaceous materials. To preserve these formulations, use the level of antimicrobial recommended for the adhesive containing only the natural material.

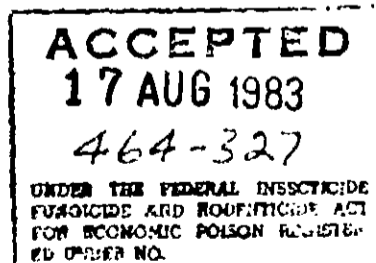
NOTE: DOWICIL 150 IS INCOMPATIBLE WITH CASEIN IN BOTH LIQUID AND DRY SYSTEMS, AND WITH SOME TYPES OF AMINE-MODIFIED CLAYS.

LAUNDRY STARCH

To increase shelf and use life of liquid formulations, add 0.05-0.15% DOWICIL 150 Antimicrobial by wt of the formulation. Add as an aqueous solution.

CONSTRUCTION MATERIALS

To increase shelf and use life of caulking, grouting, and spackling compounds, and joint cement, add 0.06-0.15% DOWICIL 150 Antimicrobial by wt of the formulation. Method of application depends on the type of formulation, and may be made dry or as a concentrated aqueous solution.



LOT

SPECIMEN LABEL



DOWICIL* 150 ANTIMICROBIAL

FOR THE CONTROL OF BACTERIA AND FUNGI IN INDUSTRIAL APPLICATIONS

ACTIVE INGREDIENT:

Cis-isomer of 1-(3-chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride 94%

INERT INGREDIENTS 6%

EPA Reg. No. 464-327

EPA Est. 464-CA-1

KEEP OUT OF REACH OF CHILDREN

WARNING

Precautionary Statements

**Hazards to Humans and Domestic Animals
MAY BE HARMFUL IF SWALLOWED**

Avoid Skin Contact

Statements of Practical Treatment

In case of skin contact, remove contaminated clothing and wash skin with plenty of water. Wash clothing before reuse.

In case of eye contact, irrigate eyes with flowing water for 15 minutes. If irritation results get medical attention.

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

Physical or Chemical Hazards

FLAMMABLE

Keep Away From Heat, Sparks, and Open Flame

**In case of an emergency endangering life or property involving this product, call collect
517-636-4400**

NOTICE

Do Not Ship or Store with Food, Feeds, Drugs or Clothing

FOR USE IN MANUFACTURING PROCESSES

22.68 kg/50 lb net

86-1476 PRINTED IN U.S.A. IN JUNE, 1983.

REPLACES SPECIMEN LABEL 86-1476 PRINTED IN JUNE, 1981.

DISCARD PREVIOUS SPECIMEN LABELS.

REVISIONS INCLUDE: USE AS A PRESERVATIVE IN WATER-BASED FORMULATIONS ADDED.

SL2180

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INKS

To increase the shelf life of fountain pen, fabric, and paper printing inks, add 0.1-0.2% DOWICIL 150 Antimicrobial by wt of the ink. Add as an aqueous solution.

LATEX EMULSIONS

To prevent bacterial deterioration during manufacture, transit, and storage of raw emulsions, add 0.05-0.15% of DOWICIL 150 Antimicrobial by wt of the total emulsion. Add as an aqueous solution.

METALWORKING FLUIDS

To control bacterial contamination that produces odors, rancidity, acidity, and destruction of soluble cutting oils, add 0.1-0.2% DOWICIL 150 Antimicrobial by wt of the formulation. Add to the water phase of the cutting fluid during formulation.

PAINT

To preserve cellulose-thickened latex paints in the can, add 0.05-0.2% DOWICIL 150 Antimicrobial by wt of the formulation. Add dry or as an aqueous solution during any phase of the formulating process in the aqueous-phase raw materials. DOWICIL 150 has no effect on the viscosity, stability, and other physical properties of the paint formulation or on the colorfastness of the paint films.

PULP AND PAPER

To protect coatings, finishes, and printing colors based on starch and latex (natural and synthetic) from bacterial and fungal attack, add 0.1-0.2% DOWICIL 150 Antimicrobial by wt of the formulation. Add as an aqueous solution. These concentrations will protect against bacterial and fungal growth for 3-6 days. Longer periods of preservation require higher concentrations.

TEXTILES

To prevent spoilage of spinning emulsions for rayon and finishing solutions, and to prevent viscosity and pH changes in printing pastes caused by bacteria and fungi, add 0.1-0.2% DOWICIL 150 Antimicrobial by wt of the formulation. Add as an aqueous solution.

STORAGE AND DISPOSAL

STORAGE

If the entire contents of a drum are not used upon opening, re-seal the polyethylene liner to keep moisture from caking the product. Water solutions of DOWICIL 150 Antimicrobial should be kept below 77°F (25°C).

NOTE: To avoid decomposition, which will release smoke and flammable vapors, store in a cool, dry place below 120°F (49°C). Do not store near flammable materials.

DISPOSAL

Prohibitions - Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide Disposal - Pesticide that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

Container Disposal - Dispose of in an incinerator or landfill approved for pesticide containers, or bury in a safe place.

General - Consult Federal, state, or local authorities for approved alternate procedures, such as limited open burning.

NOTICE: Be on warrant that this product conforms to the chemical description and specifications for the purpose stated in the label. When used in accordance with directions on product label, conditions stated on the label, and other warrants, of MERCHANTS, SUPPLIERS, AND CONTRACTORS FOR A PARTICULAR PURPOSE, the implied warranty extends to the use of this product in transportation, storage, and use under normal conditions, or under conditions of use that are not intended to be used with a similar product of any such user.

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SPECIMEN LABEL
(BACK)



**FLAMMABLE
SOLID N.O.S.**
UN 1325

Contains:
1,3-chloroallyl-
3,5,7-triaza-1-
azoniademantane
chloride

24696-A683

THE DOW CHEMICAL COMPANY

AND SUBSIDIARIES

MIDLAND, MICHIGAN 48640 USA HORGEN SWITZERLAND HONG KONG
CORAL GABLES, FLORIDA 33134 USA SARNIA, ONTARIO, CANADA

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