



BIOBAN™ BZ Antimicrobial

EPA-Registered biocide

EPA Reg. No. 464-8139

General Description

BIOBAN™ BZ Antimicrobial is a highly effective microbicide recommended as a preservative for paints and coatings, polymer emulsions, mineral slurries and pigment dispersions, inks and fountain solutions, building materials, and liquid household industrial and janitorial products. It is stable across a wide range of temperatures and pH offers effective, broad spectrum protection against both bacteria and fungi.

Regional Product Availability

United States

Active Ingredients

12% 1,2-Benzisothiazolin-3-one

8% Zinc 2-pyridinethiol-1-oxide

Physical Properties

The following are typical properties of BIOBAN™ BZ Antimicrobial; **they are not to be considered product specifications.**

Appearance:..... Flowable, grayish-white dispersion

Specific gravity (H₂O = 1):..... 1.05-1.15 mg/ml

pH (as supplied):..... 4.0 - 8.0

Viscosity @ 25°C/77°F:..... 2400 - 4800 mPA (65 - 95 KU)

BIOBAN™ BZ Antimicrobial is a water-based dispersion formulation.

Applications and Directions for Use

BIOBAN™ BZ Antimicrobial is a highly effective microbicide recommended as a preservative for paints and coatings, polymer emulsions, mineral slurries and pigment dispersions, inks and fountain solutions, building materials, and liquid household industrial and janitorial products. It is stable across a wide range of temperatures and pH offers effective, broad spectrum protection against both bacteria and fungi.

BIOBAN™ BZ Antimicrobial has been approved as an effective preservative for aqueous formulations and products such as:

- Paint and Coatings, roof coatings, and stains
- Polymer emulsions
- Process Wash Solutions
- Adhesives and Tackifiers
- Building Materials, such as joint compounds/spackling, caulks/sealants, roof coatings, grouts, mastics, sealers, and concrete admixtures
- Aqueous Mineral Slurries and Pigment Dispersions
- Inks and Fountain Solutions
- Liquid Household, Industrial, Janitorial Products, such as floor cleaners, laundry products, waxes, polishes, fabric treatment/refreshers products, car care products, deodorizer products, and solutions that are put into/onto some types of wet wipes.



The table below lists the end use applications for BIOBAN™ BZ Antimicrobial in the United States. It is recommended that BIOBAN™ BZ Antimicrobial be tested in the specific formulation in order to determine the best performing and cost-effective dosage level. Consult the product label for dosing instructions.

Application	Dose/Use Rates % (w/w)
Paints, Coatings and Emulsions	0.01 – 0.4%
Building Materials	0.01 – 0.4 %
Aqueous Mineral Slurries and Pigment Dispersions	0.01 – 0.4%
Process Wash Solutions	0.01 – 0.125%
Inks and Fountain Solutions	0.01 – 0.4%
Liquid Household, Industrial and Janitorial Products	0.01 – 0.25%

BIOBAN BZ Antimicrobial does not include a zinc oxide stabilizer to reduce the potential for wet state or dry state discoloration in the presence of iron or copper. For end-use products which do not contain zinc oxide, it is recommended that the formulator determine whether zinc oxide needs to be added to prevent discoloration.

BIOBAN BZ Antimicrobial is a dispersion formulation and should be tested in transparent formulations to ensure that clarity is not affected.

Handling Precautions

Before using this product, consult the Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

The processing and use of industrial chemicals require adequate technical and professional knowledge.

In general, avoid eye and skin contact; wear safety goggles, gloves and protective clothing. In case of eye or skin contact despite precautionary measures, wash immediately and thoroughly with plenty of warm water and obtain medical attention.

The legal requirements prevailing in your country, especially on working hygiene and in the avoidance of accidents, must be observed.

Storage

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage

For **optimal** shelf life, store between 20°C and 25°C (68°F and 77°F). Storage temperatures: 10°C (50°F) to 40°C (104°F). Keep from freezing. BIOBAN™ BZ Antimicrobial should be stored in original sealed containers in a shaded area. After prolonged storage mix prior to use.

BIOBAN™ BZ Antimicrobial in original sealed containers under appropriate storage conditions will have a shelf life of 2 years from the date of manufacture.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Microbial Control representative for more information.

Product Stewardship

When considering the use of any Dow product in a particular application, review the latest Safety Data Sheet (SDS) and country-specific product label to ensure the intended use is within the scope of approved uses. Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including Safety Data Sheets (SDS), should be consulted prior to use of Dow products. Current Safety Data Sheets are available from Dow.



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