



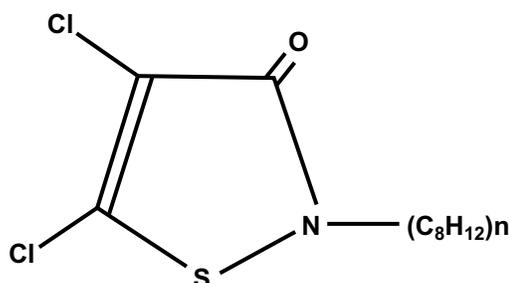
BIOBAN™ 200 Antimicrobial

Industrial Microbicide for Use in Coatings, Building Materials, Adhesives and Tackifiers
CAS Registry No. 64359-81-5

General

BIOBAN™ 200 Antimicrobial is a low VOC formulation for the protection of paint films and coatings. It is a high performance preservative against the growth of surface moulds which also displays excellent activity against algae and bacteria. The active ingredient in BIOBAN 200 Antimicrobial is 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one, which is the same active ingredient as in the well proven ROZONE™ 2000 antimicrobial. It provides the same broad spectrum activity with improved ease of formulation and similarly can be used in both exterior and interior applications.

Structure



Physical Properties

The following are typical properties of BIOBAN 200 Antimicrobial; **they are not to be considered product specifications.**

Composition.....	Preparation of dichloro-octylisothiazolinone
Appearance	Light blue dispersion
Active Ingredient (AI) concentration	20%
Carrier solvent	mainly water
Viscosity (Brookfield) @ 20°C	80 KU
Specific gravity @ 25°C (water = 1)	1.09

Special Features and Benefits

- Broad spectrum activity: controls a wide range of fungi, algae, and bacteria
- Very low water solubility: provides long-term activity by resisting leaching
- Non persistent in the environment: readily dissipated by biological and chemical means
- Flowable dispersion: easily incorporated into paint formulations
- Does not release formaldehyde
- Does not require zinc oxide for efficacy
- Effective in coatings and building products
- Low VOC formulation

Applications/ Directions for Use

BIOBAN 200 Antimicrobial is primarily designed for use in water-based systems; however, it can be used in solvent based systems depending on its compatibility with the final product and its packaging.

Recommended use levels of BIOBAN 200 Antimicrobial range from 0.12% to 0.57%, as supplied, on total weight of paint formulation.

The usage level required to obtain the desired degree of protection with BIOBAN™ 200 Antimicrobial depends on several factors. These include the climatic conditions where the paint will be applied, the type of paint produced, the condition of the surface being painted, and the number of coats of paint applied. For maximum protection we recommend using 1150 ppm active ingredient (0.57% product as supplied). Testing BIOBAN Antimicrobial in customer applications is highly recommended.

Formulating Techniques with BIOBAN 200 Antimicrobial

BIOBAN 200 Antimicrobial is a flowable dispersion that is easily incorporated into paint formulations. In principle, it can be added to the paint at any point in the paint preparation process.

Storage, Handling and Disposal

BIOBAN 200 Antimicrobial should be stored in tightly sealed original containers and preferably at room temperature. Protect from frost and heat.

If the product does freeze, it has to be mixed homogeneously after warming up and can then be used without any loss in effectiveness.

The procedures used for handling biocide solutions are similar to those used for handling concentrated acids and alkalis. The purpose is to prevent all eye and skin contact, including inhalation of mists, and thereby prevent possible injury and sensitization.

BIOBAN 200 Antimicrobial, as supplied, is corrosive to the skin and eyes (see the Toxicological Properties Section of the SDS for more information). To prevent skin or eye contact and the associated effects, we recommend the following personal protective equipment when handling these products:

- Chemical splash goggles
- Chemical-resistant elastomeric gloves (e.g., 16 mil nitrile - please contact the Dow Chemical Company for additional glove recommendations)

Note that chemical-resistant gloves are to protect against splash contact and are not intended for immersion protection.

Under open system conditions, we also highly recommend the additional use of the following personal protective equipment:

- Face shield (in addition to chemical splash goggles)
- Chemical-resistant apron
- Chemical-resistant elastomeric boots or over shoes

BIOBAN 200 Antimicrobial is a registered pesticide, please carefully read and follow the label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Safety Data Sheet

It is important that you review our BIOBAN™ 200 Antimicrobial Safety Data Sheet (SDS) before using the product.

Dow Chemical Company SDS contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products.

Under the OSHA Hazard Communication Standard, workers must have access to and understand SDS on all hazardous substances to which they are exposed. Thus, it is important that you provide appropriate training and information to your employees and make sure they have available to them SDS on any hazardous products in their workplace.

The Dow Chemical Company sends SDS for all its products, whether or not they are considered OSHA-hazardous, to the "bill to" and/or "ship to" locations of all its customers upon initial shipment (including samples). If you do not have access to one of these SDS, please contact your local Dow Chemical Company representative for an additional copy. Updated SDS are sent upon revision to all customers of record. In addition, SDS are sent annually to all customers receiving products deemed hazardous under the Superfund Amendments and Reauthorization Act.

SDS should be obtained from your suppliers of other materials recommended in this bulletin. The Dow Chemical Company is a member of the American Chemistry Council and is committed to ACC's Responsible Care¹ Program.

Product Stewardship

Dow Microbial Control encourages its customers to review their applications of Dow Microbial Control products from the standpoint of human health and environmental quality. To help ensure that Dow Microbial Control products are not used in ways for which they are not intended or tested, Dow Microbial Control personnel are willing to assist customers in dealing with ecological and product safety considerations. Contact your representative if you need any assistance or information. When considering the use of any Dow product in a particular application, review the latest Safety Data Sheet and country-specific product label to ensure the intended use is within the scope of approved uses and can be accomplished safely. Before handling any of the products mentioned in the text, obtain available product safety information and take necessary steps to ensure safety of use.

For further information visit our website:
www.dowmicrobialcontrol.com
or call:

United States and Canada: +1-800-447-4369 (phone)
+1-989-832-1560 (phone)
+1-989-832-1465 (fax)
Europe (Dow): +800-3-694-6367 (phone)
+32-3-450-2240 (phone)
+32-3-450-2815 (fax)
Europe (Rohm and Haas):
France: +41-81-755-46-54 (phone)
Germany: +41-81-755-46-54 (phone)
Italy: +41-81-755-46-54 (phone)
Pacific (Dow): +800-7776-7776¹ (phone)
+800-7779-7779¹ (fax)
+603-7958-3392 (phone)
+603-7958-5598 (fax)
Pacific (Rohm and Haas):
Japan: +81-3-6238-4118 (phone)
Korea: +82-2-3489-8901 (phone)
Singapore: +65-6796-6217 (phone)
Thailand: +662365-7000 (phone)
New Zealand and Australia: +61-3-9272-4212 (phone)
Latin America: +55-11-5188-9555 (phone)
+55-11-5188-9937 (fax)
India: +91-22-6793-4953 (phone)
+91-22-6793-4924 (fax)
Other Global Areas: +1-989-832-1560 (phone)
+1-989-832-1465 (fax)

¹Responsible Care is a registered trademark of the American Chemistry Council, Inc.

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¹except Indonesia and Vietnam