

Microbial Control

Technical Data Sheet

BIOBAN™ O 45 Antimicrobial

Regional Product Availability

Please contact your DuPont representative for specific country information.

General

BIOBAN™ O 45 Antimicrobial, previously sold as SKANE™ M-8 Microbicide, is a highly effective industrial mildewcide recommended for coatings, latex and solvent based paints, semitransparent stains and solid stains, building materials including elastomeric roof and wall coatings, caulks, sealants, joint cements, spackling, stucco, and grout, wallpaper pastes and adhesives, aqueous adhesives and tackifiers, and leather. BIOBAN™ O 45 antimicrobial offers effective, broad-spectrum protection against fungi (yeast and mold) in the wet state during manufacture and storage as well as dry-film protection against mold and mildew following application of the coating/building material.

Composition

- 45% 2-n-octyl-4-isothiazolin-3-one (OIT)
- 53-55% Propylene glycol

Physical Properties

The following are typical properties of BIOBAN™ O 45 Antimicrobial; **they are not to be considered product specifications.**

Appearance	Yellow to amber liquid
Active ingredient (AI)	2-n-octyl-4-isothiazolin-3-one
Concentration	45% minimum
Carrier solvent	Propylene glycol
pH	2.4 (10% solution)
Melting point	<-20°C (-4°F)
Boiling point (760 mmHg)	188°C (370°F)
Flash point	93°C (199°F)
Viscosity, Brookfield (20°C)	40 cP
Density	8.5-8.7 lb/gal
Specific gravity (H ₂ O = 1)	1.034

Bulking value	0.116 gal/lb
Storage stability	Excellent
Color (VCS)	8 max.

Applications and Directions for Use

The actual required concentration of BIOBAN™ O 45 Antimicrobial depends on several factors including: the climatic conditions where the paint will be applied, the level of desired performance, the type of paint produced, and the amount of zinc oxide in the formulation. The condition of the surface and number of coats applied are also significant.

The level of mildew protection obtained is proportional to the amount of BIOBAN™ O 45 Antimicrobial. Up to four pounds of BIOBAN™ O 45 Antimicrobial per hundred gallons may be used in paints used in mildew-prone areas where humid weather conditions prevail. Lower levels – such as two pounds in a primer and one pound in a topcoat – provide satisfactory performance in dryer or cooler climates.

When BIOBAN™ O 45 Antimicrobial is used in conjunction with zinc oxide, which is a mildewstat, a unique performance enhancement effect on the mildew resistance of the paint occurs.

The final selection of levels of BIOBAN™ O 45 Antimicrobial and zinc oxide will depend on the level of protection needed as well as formulation cost. In select areas, depending on climatic and paint surface conditions, some coatings manufacturers may elect to use BIOBAN™ O 45 Antimicrobial without zinc oxide. For maximum protection in mildew prone areas (e.g., Southeastern U.S.), the formulation may require the use of zinc oxide, along with higher levels of BIOBAN™ O 45 Antimicrobial. Advantage should be taken of this synergism to attain the best possible cost/performance relationship in a paint formulation. Ten pounds of zinc oxide per hundred gallons is the minimum level recommended to stabilize BIOBAN™ O 45 Antimicrobial in the presence of amines in latex formulations.

Zinc oxide is not needed for stability in solvent-based paint formulations; however, it provides increased mildewcide protection.

For more information, please contact your local DuPont representative.

Handling Precautions

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.

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.

Material is CORROSIVE. Do not get in eyes, on skin, or clothing. Causes eye damage and skin burns. May cause allergic skin reaction.

Do not mix neat (concentrated) biocides with other neat biocides. Biocides at use-level concentrations can be mixed within a final product (example: paint).

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

Storage

For optimal shelf life, store between 20°C and 25°C (68°F and 77°F). Do not store below 1°C (34°F) or above 37°C (99°F). BIOBAN™ O 45 antimicrobial should be stored in original containers in a cool and shaded area.

BIOBAN™ O 45 antimicrobial in original containers under appropriate storage conditions will have a shelf life of 5 years from the date of manufacture.

Disposal Considerations

Dispose of 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.

Product Stewardship

When considering the use of any DuPont 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. DuPont 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 DuPont products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

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



Nutrition & Biosciences

Microbial Control
microbialcontrol.dupont.com

Copyright © 2021 DuPont. All rights reserved. DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.

DISCLAIMER

The information contained herein is for informational purposes only and is not legal advice. It represents a summary of the information available to us at the time of release, and does not constitute an interpretation of the regulation. The information provided only applies to the products discussed and not combinations of products or all uses and the information is not promised or guaranteed to be correct or complete. It is your responsibility to identify and assess regulations applying to your activities and your purchase and to abide by any law or regulation, which may apply to the specific use you make of our product and your organization. We moreover recommend that you verify on a regular basis, with your local office, the latest regulatory status of our product.

DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont. DuPont assumes no obligation and hereby DISCLAIMS ALL LIABILITY for the information in this document. References to "DowDuPont" "DuPont" or the "Company" means the DuPont legal entity selling the products to Customer unless otherwise expressly noted. Other than as set forth in a contract of sale, DUPONT MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION AND/PRODUCTS DESCRIBED HEREIN, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Use biocides safely. Always read the label and product information before use.