



## BIOBAN™ 425 Antimicrobial

Preservative for Household and Industrial & Institutional Products

### General

BIOBAN™ 425 Antimicrobial is a combination of active ingredients which delivers effective, broad-spectrum antibacterial and enhanced antifungal protection for a wide range of products including wipes<sup>1</sup>.

BIOBAN 425 is a low VOC solution of: 25 % active ingredient (2-methyl-4-isothiazolin-3-one (MIT) and 2-n-Octyl-4-isothiazolin-3-one (OIT) in a proprietary low emission (LE) carrier.

### Physical Properties

The following are typical properties of BIOBAN™ 425 Antimicrobial; **they are not to be considered product specifications.**

Appearance: ..... Colorless to pale yellow  
 Odor: ..... Mild  
 Density 20°C: ..... 1.105 - 1.125 g/mL  
 pH (10% in DI water): ..... 2 - 6

### Benefits

BIOBAN™ 425 Antimicrobial provides robust, long term protection of the finished product against a variety of bacteria in addition to yeast and mold for enhanced antifungal control.

BIOBAN 425 does not contain or release formaldehyde. It is formulated with low VOC ingredients and without salts. Additional benefits include:

- Pre-blended combination of two Dow Microbial Control products into a single formulation for streamlined plant operations
- Broad pH stability (2 to 10) and temperature stability (up to 50°C)
- Ease of incorporation in household products
- Compatible and effective with anionic, cationic, non-ionic surfactants and with most commonly used household product ingredients.
- Cost effective

### Applications/ Dosage Recommendations

BIOBAN™ 425 Antimicrobial may be dosed within a range of 0.01-0.075% product, as supplied in accordance with its US EPA label.

<sup>1</sup>Not to be used in Personal Care or Hygiene applications

Provided below is a listing of target applications and **recommended dosage ranges** for BIOBAN™ 425 Antimicrobial.

<b>APPLICATION</b>	<b>RECOMMENDED DOSAGE RATE (product, as supplied)</b>	<b>DOSAGE (total active ingredient)</b>
All Purpose Cleaners	0.03-0.05%	75-125 ppm
Laundry	0.03-0.05%	75-125 ppm
Dish detergents	0.03-0.05%	75- 125 ppm
Surfactants	0.03-0.05%	75- 125 ppm
Automotive washes/waxes	0.03-0.05%	75- 125 ppm
Floor Polishes / Cleaners	0.03-0.06%	75-150 ppm
Air Care formulations	0.02-0.03%	50-75 ppm
Wet Wipes	0.06-0.075%	150-187.5 ppm

Dosage levels should be verified with testing due to the microbial susceptibility of various formulations.

## **Handling Precautions**

Please refer to the product Safety Data Sheet (SDS) for precise handling instructions.

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.

BIOBAN™ 425 Antimicrobial should be stored in closed original containers at ambient temperature protected from direct heat.

If the product does freeze, allow it to return to room temperature and it will turn to a liquid phase. The product can be used, after homogeneous stirring, without any loss of effectiveness. Bioactivity is unaffected by freezing and melting.

The shelf life of BIOBAN 425, if stored in original containers under appropriate storage conditions, is of 24 months.

## **US EPA Registration**

BIOBAN™ 425 Antimicrobial is registered with the US EPA for use as an in-can preservative for household and industrial/institutional formulations. The product must be used in accordance with the specific instructions on the EPA label.

## **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.

For further information visit our website:  
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