



BIOBAN™ PH 100 Antimicrobial

Biocide for use in PT06 and PT13 Applications

CAS Reg. No. 122-99-6

EINECS No. 204-589-7

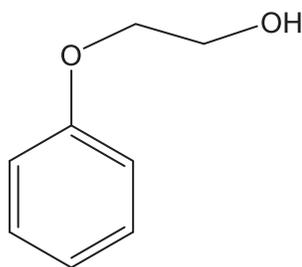
General

BIOBAN™ PH 100 Antimicrobial is a broad spectrum bactericide useful for the protection of water-based products and concentrates over a wide pH range (pH 3.0-10.0). BIOBAN PH 100 has both water and oil solubility.

BIOBAN PH 100 offers the following benefits:

- Effective control of bacteria
- Excellent performance when used in combination with a wide range of preservatives and fungicides
- Low odor level
- Will not impart additional levels of Phenol
- Will not impart unwanted color to a finished product

Structure



Physical Properties

The following are typical properties of BIOBAN™ PH 100 Antimicrobial; **they are not to be considered product specifications.**

Assay, %:.....	99.5 Min
Density (at 20° C):.....	1.109
Boiling point (760 mmHg, 1.01 bar):.....	244°C/417°F
Flash point (Setaflash Closed Cup):.....	119°C/246°F
Solubility, g/100g @ 25°C	
Solvent in water:	3.1 g
Water in solvent:.....	13.6 g

Antimicrobial Activity

The broad antibacterial spectrum of BIOBAN™ PH 100 Antimicrobial is demonstrated by the minimum inhibitory concentrations (MIC) needed for control of the typical microorganisms shown in Table 1.

Table 1
MIC Results

Organism	MIC (%)
<i>Pseudomonas aeruginosa</i>	0.050
<i>Escherichia coli</i>	0.050
<i>Proteus vulgaris</i>	0.050
<i>Staphylococcus aureus</i>	0.500
<i>Bacillus subtilis</i>	0.350
<i>Bacillus mycoides</i>	0.350

Reported MIC values demonstrate the spectrum of antimicrobial activity of phenoxyethanol. The MIC test results only demonstrate the innate activity and should not be used as a guide to determine levels to be used in a specific formulation.

Biocidal Products Directive Compliance

Regional specific registrations:

BIOBAN™ PH 100 Antimicrobial is a biocidal product intended for use in accordance with product types 6 (In-can preservatives) and 13 (Metalworking-fluid preservatives) of the EU Biocidal Product Directive 98/8/EC (BPD).

Please note that not all products are registered in all regions for all applications. Please contact your local Dow representative for detailed technical information applicable to your individual situation.

Toxicology and First Aid

For product safety information, refer to the Safety Data Sheet (SDS).

Handling, Storage and Disposal

Please refer to the Safety Data Sheet (SDS). Do not contaminate water, food or feed by storage or disposal.

BIOBAN™ PH 100 Antimicrobial should be stored at temperatures below 30°C (86°F). Containers should not be exposed to direct sunlight. Storage conditions should also be in conformance with applicable legal, fire, and insurance regulations.

BIOBAN PH 100 has a freezing point of 12°C (54°F) and will freeze stored below this temperature. This is a common occurrence and will not impact the quality of the material.

Based on the toxicology of BIOBAN PH 100, the principal exposure route of concern is the direct contact of the liquid with skin and eyes. When handling BIOBAN PH 100, personal protection equipment including a rubber apron, suitable impervious full-length gloves and footwear, and chemical splash goggles should be worn.

Prior to disposal, the residual contents of BIOBAN PH 100 containers should be drained into the product to be preserved. A small quantity of BIOBAN PH 100 will likely remain in the container; the container should be triple rinsed and the rinse water should be treated as waste. Excess product and rinse water should be disposed according to local regulations for disposal. To ensure that containers are not reused, they should be pierced before disposal.

Extinguish fires involving BIOBAN PH 100 with water spray, CO₂, foam, or dry chemical extinguisher.

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 Technical Representative for more information.

Shipping and Packaging

HDPE drum / 220 kg
HDPE IBC / 1000 kg

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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