**ROCIMA™ MBX Biocide**

In-can preservation of paints, binders and related products

**BLUE ANGEL COMPLIANT**

**General**

ROCIMA™ MBX Biocide is an aqueous solution of BIT (1,2-Benzisothiazolin-3-one) and MIT (2-Methyl-4-isothiazolin-3-one) at a ratio of 1:1 for the in-can preservation of technical products.

ROCIMA MBX is a VOC- and AOX-free preparation. It is formulated without the addition of any organic solvents, halogenated organic compounds, formaldehyde releasing compounds or bivalent metal ions, and therefore, it is highly compatible in most binder and paint systems.

ROCIMA MBX combines the well proven active ingredients BIT and MIT which can provide a long-term and broad efficacy spectrum.

ROCIMA MBX is based on active ingredients that comply with European and North American food contact regulations, e.g. coatings and adhesives, provided that the customary dosage rates are not exceeded.

ROCIMA MBX complies with the requirements of the German Blue Angel Ecolabel for interior wall paints (RAL UZ-102).

**Physical Properties**

The following are typical properties of ROCIMA™ MBX Biocide; they are not to be considered product specifications.

- **Appearance:** Colorless to yellowish liquid
- **Odor:** Mild
- **Color (Gardner):** Max. 3 ISO 4630
- **Density 20°C:** 1.03 ± 0.01 g/mL ISO 2811-3
- **Refractive index n<sub>20</sub>:** 1.350 ± 0.005 g/mL ASTM D 1218-02
- **pH as is:** 8 – 9.5

**Miscibility/Solubility**

Miscible with water and most low alcohols, glycols and glycol ethers, clearly soluble in water at ready to use concentrations.

**Stability**

The stability of biocides in general is dependent on exposure time and the presence of other reactive chemicals.

**Temperature:** For optimum efficacy it is generally recommended to add ROCIMA MBX below 40°C. Short term exposure to 60°C will have minimal impact but an exposure over a prolonged time to elevated temperatures must be avoided.

**pH range:** ROCIMA MBX is applicable and efficacious from pH 4 to 11.
Compatibility
ROCIMA™ MBX Biocide shows very good compatibility, even with critical systems and systems sensitive to the presence of formaldehyde. However, it is generally advisable to check compatibility prior to any special application.

Applications/ Directions for Use

ROCIMA™ MBX Biocide has a broad spectrum of activity against microorganisms, allowing a robust preservation of a wide range of products such as paints, adhesives, latex emulsions, tackifiers, mineral slurries, pigment dispersions and other technical water-based products.

ROCIMA MBX contains a combination of non-halogenated isothiazolinones that provides a long-term preservation and minimizes the risk of development of resistant microorganisms without exceeding existing labeling limits established for preservatives.

Due to the high compatibility and stability it is possible to combine ROCIMA MBX in the finished product with other active ingredients whenever there are special requirements (e.g. speed of kill, increased efficacy against yeasts or molds, head space protection).

ROCIMA MBX is suitable to preserve products which are free of VOC and has no contribution to AOX.

ROCIMA MBX complies with several food contact legislations of the European Union and of the Food and Drug Administration (FDA) of the USA. For specific information contact your Dow representative or liaise with our Product Integrity Department.

Dosage

Typical dose levels of ROCIMA™ MBX Biocide are between 0.2– 0.4% in the finished product.

The amount of a preservative to be added is dependent on the susceptibility of the raw materials against microbial spoilage and their level of contamination. The amount of preservative used can be minimized by observing hygienic conditions in the storage of raw materials, during production, filling processes and subsequent warehousing.

Our Biological and Technical Laboratories are able to give you professional advice whenever necessary.

Handling and Storage

Handling

Please refer to the Safety Data Sheet (SDS) of this product 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.

Storage

ROCIMA™ MBX Biocide should be stored in tightly closed original containers and preferably at room temperature. If stored at or below 0°C solidification can take place which can
be reversed by simple warming up to room temperature. After a homogeneous mixing ROCIMA™ MBX Biocide can be used without any loss in effectiveness.

Protect from light and heat.

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.

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.

Notice: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer’s use and for ensuring that Customer’s workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to “Dow” or the “Company” mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

USE BIOCIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.