**Biocides**

**ROCIMA™ MBX**  In-can preservation of paints, binders and related products

**BLUE ANGEL COMPLIANT**

**Description**

ROCIMA MBX Biocide is an aqueous solution of BIT (1,2-Benzisothiazolin-3-one) and MIT (2-Methyl-4-isothiazolin-3-one) 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 Biocide complies with the requirements of the German Blue Angel Ecolabel for interior wall paints (RAL UZ-102).

**Composition and Technical Data**

Composition: Solution of 2-Methyl-4-isothiazolin-3-one (MIT) and 1,2-Benzisothiazolin-3-one (BIT) at a ratio of 1:1.

**Typical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>colourless to yellowish liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>mild</td>
</tr>
<tr>
<td>Colour (Gardner)</td>
<td>max. 3. ISO 4630</td>
</tr>
<tr>
<td>Density 20°C</td>
<td>1.03 ± 0.01 g/ml ISO 2811-3</td>
</tr>
<tr>
<td>Refractive index n&lt;sup&gt;20&lt;/sup&gt; D</td>
<td>1.350 ± 0.005 g/ml ASTM D 1218-02</td>
</tr>
<tr>
<td>pH, as is</td>
<td>8 – 9.5</td>
</tr>
</tbody>
</table>

**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 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.

Application and Activity

ROCIMA MBX Biocide has a broad spectrum of activity against micro-organisms, 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 nonhalogenated isothiazolinones that provides a long term preservation and minimizes the risk of development of resistant micro-organisms without exceeding existing labelling 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 moulds, head space protection).

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

ROCIMA MBX Biocide complies with several food contact legislations of the European Union and of the Food and Drug Administration (FDA) of the USA. For specific information please ask your local Rohm and Haas contact or liaise with our Product Integrity Department.

Dosage

Typical dose levels of ROCIMA MBX 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 minimised 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 when ever necessary.

Handling

Please refer to the Material Safety Data Sheet 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 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 can be used without any loss in effectiveness. Protect from light and heat.

Caution

Use biocides safely. Always read the label and product information before use.
ROCIMA is a trademark of Rohm and Haas Company, or of its subsidiaries or affiliates. The Company’s policy is to register its trademarks, where products designated thereby are marketed by the Company, its subsidiaries or affiliates.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Suggestions for use of our products, or the inclusion of descriptive material from patents and the citation of specific patents in this publication, should not be understood as recommending the use of our products in violation of any patents or as permission or license to use any patent of the Rohm and Haas Company.