

ROCIMA™ 520S BIOCIDE

Preservative for Aqueous Binder Dispersions and Other Technical Products

Description

ROCIMA 520S Biocide is a liquid in-can preservative for universal use in technical products.

The optimised ratios of the chemically different active principles of ROCIMA 520S provide excellent bacterial and fungal control and help to prevent the growth of resistant strains of micro-organisms.

ROCIMA 520S contains active substances permitted by the BfR and FDA for use in their application field, provided that the customary dosage rates are not exceeded.

ROCIMA 520S may be employed in binders for final products to be used in close proximity to food, but not in immediate contact.

Composition and Technical Data

Composition: Preparation of chlormethyl-/methylisothiazolone and bronopol

Typical Properties

These properties are typical but do not constitute specifications.

Test	Min.	Max.	Method
Appearance	colourless to yellowish, clear liquid		Visual
Colour (Gardner)	-	3	ISO 4630
Density 20°C	1.1000	1.1200 g/cm³	ISO 2811-3
Refractive Index n $\frac{20}{D}$	1.3760	1.3860	ASTM D 1218-02
Viscosity η 20°C	2.0	15.0 mPa.s	ISO 2555
pH (as it is)	2	6	IN 7463 ACM
Flash point	> 100°C o.c. Cleveland		ISO 2592

Miscibility/Solubility

Forms clear solutions in all proportions with water, low alcohols, and glycol ethers.

Compatibility

ROCIMA 520S is compatible with most common binders. It is generally advisable to check compatibility prior to any application.

Stability

Temperature: up to $40 \infty C$ (short period to $60 \degree C$).

pH range: 4 to 9.

Application and Activity

ROCIMA 520S has been developed especially for preservation of aqueous dispersion and emulsion binders.

However, it can generally be used in technical products, after biological testing has been carried out.

ROCIMA 520S contains neither cationic nor phenolic substances. Therefore, it is particularly suited for use in products not compatible with these substances.

ROCIMA 520S has a broad spectrum of activity. It is effective against gram-positive and gram-negative, aerobic and anaerobic bacteria together with various species of mould and yeast.

ROCIMA 520S 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.

The number of technical products being preserved with ROCIMA 520S is increasing steadily and it is not always possible to predict its suitability. The optimum use should be established by preliminary experiments. In critical cases, predilution with water is often helpful.

Dosage

ROCIMA 520S due to its good effectiveness only requires small amounts to be added for complete in-can protection. As a general guideline the usage of 0.1% in relation to the total formula is recommended.

The dosage rates of an in-can preservative depend upon the degree of contamination and susceptibility of the raw materials used in the formulation.

The following concentrations are recommended as a guideline only:

 Paints
 0.05 - 0.30%

 Glues, Adhesives
 0.10 - 0.33%

 Plasters, binders
 0.05 - 0.25%

 Thickener solutions, pastes
 0.10 - 0.30%

Our Biological and Application Laboratories are at your disposal for the solution of microbiological problems.

As a further preventive measure against bacterial infections we advise to pay full attention to the cleanliness of storage and production facilities.

For regular cleaning and disinfection of manufacturing facilities, tubings, storage containers, etc., we recommend the use of a 0.5% solution in water of ROCIMA 101.

Handling

Please refer to the 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 520S Biocide should be stored in tightly sealed original containers in a cool place. Below 0∞ C crystallisation can take place. After simply warming up to room temperature, preferably by stirring, the crystals will redissolve and ROCIMA 520S can be used without any loss in effectiveness.

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.



©Rohm and Haas, 2007 All rights reserved.

September 2007 BIO.ROCIMA™ 520S Biocide.PDS.E.