

ROCIMA™ BT NV2 Industrial Microbicide

General Description

ROCIMA BT NV2 is a zero VOC aqueous dispersion containing 19% 1,2-Benzisothiazolin-3-one (BIT).

Physical and Chemical Properties

These properties are typical but do not constitute specifications.

Composition	An aqueous dispersion of 1,2-Benzisothiazolin-3-one at 19% av.
Physical form and appearance	Opaque white liquid
Viscosity	500 cP, at 20°C
Specific gravity	1.05, at 20°C
pH	~7
Boiling point	~100°C
Solubility	Dispersible in water
Stability	Stable under all normal storage conditions

Performance Benefits

- Broad spectrum activity in high pH systems, controlling bacteria and fungi (yeasts and molds)
- Active ingredient is stable up to 150°C providing increased processing flexibility
- Ease of handling due to its liquid form and good compatibility in most aqueous compositions.
- A Zero VOC containing formulation, helping to reduce VOC content in final product

Used at recommended dose levels, ROCIMA BT NV2 is effective on a number of microorganisms including:

Bacteria

Bacillus megaterium
Bacillus subtilis
Escherichia coli
Klebsiella pneumoniae
Proteus vulgaris
Pseudomonas aeruginosa
Salmonella typhosa
Staphylococcus aureus

Molds

Alternaria radicina
Aspergillus niger
Aspergillus penicilloides
Rhizopus stolonifer
Trichophyton mentagrophytes

Yeasts

Candida albicans
Saccharomyces cerevisiae

U.S. Regulatory Clearances

ROCIMA BT NV2 is registered with the U.S. Environmental Protection Agency and has been granted EPA registration No. 80285-3. Under 40 CFR 180.1001(d) its components are exempt from the requirement for a

tolerance when used in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticides applied to growing agricultural crops. Not more than 0.1% of the active ingredient, BIT, is allowed in such pesticide formulations.

BIT, the active ingredient of ROCIMA BT NV2, is cleared for use under the following FDA clearances:

- 21 CFR 175.105, as a preservative of adhesives
- 21 CFR 176.170, as preservative for paper coating compositions, at level not to exceed 0.01 mg/in² of finished paper or paperboard in contact with fatty & aqueous food.
- 21 CFR 176.180, as preservative for paper coating compositions, at level not to exceed 0.02 mg/in² of finished paper or paperboard in contact with dry food.
- 21 CFR 176.300, slimicides (in manufacture of food contact paper or paperboard) at level not to exceed 0.06 lb. per ton of dry weight fiber
- 21 CFR 177.2600(c)(4)(ix), uncured latex rubber (consult regulation for limitations)

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

ROCIMA BT NV2 is an effective preservative in most aqueous compositions. The concentration required to give protection depends on several factors. These include the susceptibility of the system to microbiological degradation, the extent to which microorganisms can gain access, the species involved, pH, temperature, and length of time for which protection is required.

For protection against bacterial attack, a concentration within the range 0.02 to 0.25% ROCIMA BT NV2 is almost invariably sufficient. In dilute fluid systems, spoilage is usually controlled with dosages not greater than 0.09%. Control of mold growth, particularly on paste products of high solids content, may occasionally require demand dosages above 0.25%.

Trials at different concentrations are recommended. Typical applications, and the suggested range of concentrations on which trials are based, are:

Type of Material to be Protected	Pounds of ROCIMA BT NV2 Per 1,000 Pounds of Material to be Protected (% ROCIMA BT NV2 based on total weight of product)	
Latices such as polymer latices based on monomers such as acrylate, butadiene, PVA or styrene; synthetic rubber/latex.	0.5 to 1.5 lb	(0.05 – 0.15%)
Oil-in-water emulsions such as textile spin-finish solutions, cutting/rolling oils, soluble oils (metal and engineering industries), and photographic emulsions. Note: limit amount of ROCIMA BT NV2 in metalworking fluid concentrate (to be diluted before use) to 3.0% to reduce the possibility of dermal sensitization.	0.5 to 1.8 lb	(0.05 – 0.18%)
Paints and coatings such as aqueous coatings, water-based paints, and emulsion paints	0.5 to 2.5 lb	(0.05 – 0.25%)
Inks and font solutions	0.5 to 2.5 lb	(0.05 – 0.25%)
Water-based adhesives , including animal glues, adhesives based on carboxymethylcellulose (CMC) and derivatives, gelatin and/or latex	0.5 to 2.5 lb	(0.05 – 0.25%)
Aqueous slurries of pigments such as titanium dioxide slurries or of minerals such as kaolin, calcium carbonate, calcium sulfate, or magnesium sulfate	0.4 to 1.25 lb	(0.04 – 0.125%)
Building and construction materials such as caulks, sealants, grouts, spackling, ready-mixed cement and wallboard compounds, and tape joint compounds	0.8 to 2.5 lb	(0.08 – 0.25%)
Pesticide formulations , including in-can protection and protection of use dilutions	0.5 to 2.5 lb	(0.05 – 0.25%)

Oil recovery materials , such as drill muds, packer fluids, and completion fluids, containing polysaccharide fluid loss control agents and/or thickeners such as starch, guar, or xanthan gum	0.5 to 1.5 lb per 1000 lb. of fluid or 15 to 45 lb per 1000 lb. of dry polysaccharide added to fluid	(0.05 – 0.15%) (1.5 – 4.5%)
Secondary oil recovery injection water containing additives, such as polymer or micellar/polymer waterfloods using thickeners such as xanthan gum and/or polyacrylamides	0.15 to 1.5 lb of total weight of fluid	(0.015 – 0.15%)
Leather processing solutions —to preserve the solutions	0.25 to 2 lb	(0.025 – 0.2%)
Fresh animal hides and skins —To preserve the integrity of the hides and skins before or during processing. Add the appropriate quantity of ROCIMA BT NV2 to the brine solution during the curing operation or treat hides or skins with an appropriately diluted aqueous solution during other portions of the processing operation. The specific use rate and contact time needed to control microbial attack will depend on the degree of decomposition of the hides or skins prior to treatment.	1 to 24 pounds (13 fluid ounces to 2.5 gallons) of ROCIMA BT NV2 per 1000 pounds of hides or skins	
Paper coatings to be used in paper-making , including rosin dispersions, starch and casein based products	0.5 to 1.5 lb	(0.05 – 0.15 %)
Pulp & paper mill system slime control —The preferred method of addition is by shock dosing because this ensures that a high concentration of ROCIMA BT NV2 is present in the system for several hours. If a slime control agent is added by continuous methods over periods of several hours, its concentration in the system at all times is low. This can lead to the development of resistant organisms, which is less likely to occur when the shock dosing method is used.		
It is not possible to give precise recommendations as to the quantity of ROCIMA BT NV2 to add to control slime formation, because the magnitude of the problem varies greatly from mill to mill, depending on the furnish employed, the cleanliness of the mill system, and the additional nutrients (for example, starch) that may be added to the stock.		
The following quantities of ROCIMA BT NV2 are suggested for trial:		
Shock dosing: If this preferred method is adopted, add 2.5 to 9 ounces of ROCIMA BT NV2 for each ton of paper produced per day as a single shock dose, the actual quantity to be used depending on the severity of the slime problem. This addition may be made to any part of the stock preparation or backwater system. Alternatively, the addition may be made to those parts of the system where it is known that slime deposits accumulate.		
Continuous addition: If this method is adopted, add ROCIMA BT NV2 continuously for either the single period of 8 hours during every 24 hours or for two separate periods of 4 hours during every 24 hours. Meter ROCIMA BT NV2 into the recirculated backwater at a rate of 7 to 8.5 ounces for each ton of paper produced during the dosing period.		

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.

Storage

ROCIMA BT NV2 should be stored at room temperature in tightly sealed original containers. Protect from frost and heat. Any supplies which do freeze must be mixed thoroughly after thawing before they can be used without any loss in efficacy.

Due to its inherent characteristics dispersions may become partially inhomogeneous upon prolonged storage. We therefore generally advise to mix such products before use.

More information on the web about our products and services, and all our worldwide addresses:
www.rohmhaas.com

Use Biocides Safely. Always read product information and label before use.

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