

MERGAL® BIT20

Wet-State Preservative

Paints & Coatings/US

EPA Registration No.: 5383-121

Mergal® BIT20 is a broad-spectrum liquid preservative designed to inhibit the growth of microorganisms such as bacteria and fungi in aqueous based formulations.

Application & Use

Mergal® BIT20 provides long-term protection in oil-in water emulsions, lattices, emulsion paints, water-based adhesives, casein and rosin dispersions, textile spin-finish solutions, pesticide formulations, aqueous slurries, tape joint compounds, specialty and household products, and leather processing solutions. The active ingredient is highly heat resistant and stable in presence of amines. Mergal BIT20 is formaldehyde-free.

This product is suitable for systems with a pH of 3 - 13 and at a temperature up to 200°C.

Product Highlights

- Long lasting, broad-spectrum protection
- Globally approved active with good compatibility
- Highly heat resistant and pH stable
- Liquid delivery of BIT for compatibility in systems with low solids content
- Low freezing point and excellent freeze-thaw recovery
- FDA clearances

Active Substance

19.2%	1,2-Benzisothiazolin-3(2H)-one	BIT	 <p>BIT C₇H₅NOS</p>
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Physical Properties

The following are typical properties of Mergal® BIT20; they are not to be considered product specifications.

Appearance:	Pale liquid
Specific Gravity, 25°C:	1.2
pH (as is)	>12.0
Viscosity, 25°C	200 - 400
Solubility	Water soluble

Function/Activity

Mergal® BIT20 is effective against bacterial and fungal contamination. It is added at a rate between 0.05% - 0.35% by weight of the final product. When used as the sole in-container preservative, higher use levels are recommended to avoid spoilage from certain bacterial organisms such as Pseudomonas and Burkholderia. The level required to protect any particular system depends on a variety of factors, including the initial level of microbiological contamination, the components of the system, the likelihood of exposure to repeat microbiological intrusions, residual reducing and oxidizing agents, and the temperature and pH of the system. Suggested use levels should be verified by field trials and are reported as percentage of the end-use product.

Function	% Wt/Wt
Adhesives	0.05 - 0.35%
Construction Compositions	0.05 - 0.35%
Emulsion Paints	0.05 - 0.35%
Inks	0.05 - 0.35%
Latices	0.05 - 0.35%
Leather Processing Solutions	0.05 - 0.35%
Metalworking Fluids	0.05 - 0.35%
Mineral Slurries	0.05 - 0.35%
Paper Coatings	0.05 - 0.35%
Pesticide Formulations	0.05 - 0.35%
Polymer Emulsions	0.05 - 0.35%
Textile Spin-finish & Coatings	0.05 - 0.35%

Formulating Considerations

Mergal® BIT20 is a liquid product and should be slowly added early on in the manufacturing process with good mixing. Mergal® BIT20 is caustic and may have other benefits during addition to paint grind steps, such as reducing the use of a pH adjuster and thickener swelling. The presence of strong oxidizing agents may result in the degradation of the active. The active is chemically compatible with most other in-container preservatives such as CMIT/MIT, bronopol, zinc and sodium pyrithione, IPBC, OIT, and formaldehyde-donors. The active ingredient is stable at all pH values but most soluble at higher pH values and at alkaline pH values. For this reason, use levels of Mergal® BIT20 should be higher in products with acidic pH values.

Due to various possibilities of application and different methods of processing, it is advised to check compatibility in the development of new products. Contact your Arxada representative for assistance.

Shelf-life is 12 months from date of manufacture.

Packaging

Mergal® BIT20 is packaged in:

Package Type	Net Weight
Pail	45 lbs / 20 kg
Small Drum	100 lbs / 45 kg
Large Drum	470 lbs / 213 kg
Tote	2450 lbs / 1111 kg

Product Safety & Additional Information

For handling, storage, health, and safety information and disposal procedures, as well as additional information, please refer to the Safety Data Sheet (SDS) and label.



For more information visit:
www.arxada.com

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