MERGAL® 198

Broad-spectrum preservative for wet-state protection

Description

Mergal® 198 is a liquid, organic based bactericide used for the protection of water-based products against microbial spoilage in the wet state. Mergal 198 can be used for preserving both raw materials as well as finished product.

Application & Use

Mergal 198 is useful for the protection of various systems used for applications such as resins, emulsion paints, adhesives, dispersed colors, caulks, sealants, and printing inks. Major advantages of Mergal 198 are that it is pH stable and compatible in many different systems, and it is highly cost-effective.

Mergal 198 is specifically developed to protect aqueous materials against microbial attack during storage in the wet state. Due to its low viscosity and complete solubility in water, Mergal 198 can be easily incorporated at any point in the manufacturing operation.

The product is usually suitable for use under the following conditions:

- pH between 7 – 13
- Temperatures up to 100 °C

Product Highlights

- Especially effective against a broad variety of bacteria
- Fast germ reduction effect
- Temperature stable
- Cost-effective
- Head space protection

Physical Properties

The following are typical properties of Mergal 198; they are not to be considered product specifications.

Appearance: ..... Clear to yellow liquid
Specific Gravity, 25°C:..... Approx. 1.09
pH (as is): ..... Approx. 8 to 9
Solubility: ..... Miscible with water in any ratio

Antimicrobial Activity

Mergal® 198 has a broad spectrum of efficacy against a wide range of microorganisms, especially bacteria and fungi. Examples of organisms controlled by Mergal 198 are:

Bacteria	**Fungi and Yeast**
Alcaligenes faecalis	*Aspergillus niger*
Bacillus subtilis	*Candida albicans*
Desulfovibrio sp.	*Homoconis resinae*
Enterobacter aerogenes	*Penicillium funiculosum*
Enterobacter gergoviae	*Rhodotorula sp.*
Escherichia coli	*Saccharomyces cerevisae*
Klebsiella pneumonia	
Micrococcus luteus	
Myroides odoratus	
Pseudomonas aeruginosa	
Pseudomonas fluorescens	
Pseudomonas putida	
Pseudomonas stutzeri	

Function/Activity

The level required to protect any particular system depends on a variety of factors: initial level of microbiological contamination, the components of the system, the likelihood of exposure to repeated microbiological intrusions, the intended protection period, storage conditions of the preserved system, 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.

	% Wt/Wt
Emulsion resins	0.05 – 0.2
Emulsion paints and dispersed colors	0.1 – 0.3
Starch adhesives	0.1 – 0.6

Formulation Considerations

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 Troy representative for assistance.

Shelf-life is 24 months from date of manufacture.

Shipping & Packaging

Mergal® 198 is packaged in:

Shipping Container	Net Weight	Shipping Container	Net Weight
Pail	30 kg	Tote	1,050 kg
Drum	220 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 product label.