

Mergal® K14 is a stabilized isothiazolinone (CMIT/MIT) in-can preservative that provides a broad spectrum of activity against bacteria and fungi. It used for a wide variety of water-based preservative applications.

### Application & Use

Mergal® K14 is a liquid microbiocide for use in various waterborne end-use products, including paints and coatings, emulsions, adhesives, and building materials. Mergal® K14 is especially suited for systems in w hich enhancement of long-term CMIT/MIT stability is desired.

This product is suitable for systems with a pH of 3 - 9 and at a temperature up to 60°C.

### Product Highlights

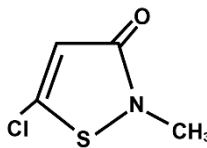
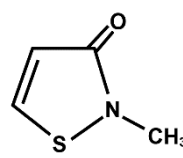
- Fast-acting broad-spectrum protection
- Highly stable at alkaline pH values
- Cost-effective
- Globally approved active ingredients
- Low VOC

### Physical Properties

*The following are typical properties of Mergal® K14; they are not to be considered product specifications.*

<b>Appearance:</b>	Clear amber liquid
<b>Specific Gravity, 25°C:</b>	1.0 - 1.1
<b>pH (as is)</b>	3.0 -5.0
<b>Solubility</b>	Completely soluble in water

### Active Substance

0.5%	5 Chloro-2-Methyl-4-isothiazolin-3-one	CMIT	 <p><b>CMIT</b> C<sub>4</sub>H<sub>4</sub>ClNOS</p>
0.2%	2-Methyl-4-isothiazolin-3-one	MIT	 <p><b>MIT</b> C<sub>4</sub>H<sub>5</sub>NOS</p>

## Function/Activity

Mergal® K14 is an in-container preservative effective against bacterial and fungal contamination. It is typically added at a rate of 0.10 - 0.20% by weight of the final product. 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
Emulsions	0.10 - 0.20%
Paints & Coatings	0.10 - 0.20%
Joint Cements	0.10 - 0.20%
Adhesives	0.15 - 0.30%
Home Care Cleaning Products	0.15 - 0.30%
Laundry Additives	0.15 - 0.30%

## Formulating Considerations

Mergal® K14 should be added with good agitation or mixing and at any stage of the production process. The actives are also susceptible to rapid degradation under reducing conditions, but are generally stable under oxidizing conditions.

The actives in Mergal® K14 are not typically long-term stable when formulated into products containing amines or sulfides. For best results and to achieve a homogeneous distribution, Mergal® K14 should be added as early in the production process as possible provided there are no adverse conditions present (e.g., temperature > 60°C). The stabilizer in Mergal® K14 may release low levels of formaldehyde under certain conditions.

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 24 months from date of manufacture.

## Packaging

Mergal® K14 is packaged in:

Package Type	Net Weight
Pail	45 lbs / 20 kg
Large Drum	441 lbs / 200 kg
Tote	2300 lbs / 1043 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](http://www.arxada.com)

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