## arxada

# MERGAL<sup>®</sup> 530

### Industrial Microbiocide

#### Paints & Coatings/US

#### EPA Registration No.: 5383-154

Mergal<sup>®</sup> 530 is a broad-spectrum, quick kill, fast dissipating biocide that carries a low environmental impact. The nonoxidizing yet extremely rapid biocidal mechanism of Mergal<sup>®</sup> 530 makes it ideally suited for a wide variety of industrial applications.

#### **Application & Use**

Mergal® 530 is a liquid product that is miscible in water and easily incorporated into waterborne systems. It is registered for use in applications such as coatings, resins, emulsions, sealants, and caulks. It is also registered for recirculating cooling water, paper mill white water systems, brewery/cannery pasteurizing water, metalworking cutting fluids, non-potable reverse osmosis systems, enhanced oil recovery systems, and publically owned treatment works. Mergal® 530 has been used effectively to control microbiological growth in process water and raw materials prior to their addition to the process. This versatile antimicrobial can be used as part of a clean water flush during process shutdown and at start-up for maintaining plant hygiene and maximizing the effectiveness of the microbiological control / preservation program. Finally, Mergal® 530 can be used to treat industrial products to enhance the life span of secondarily applied preservatives. Arxada is uniquely qualified to determine whether Mergal® 530 is right for your application as part of a comprehensive solution to microbiological problems.

This product is suitable for systems with a pH of 3 - 10 and at a temperature up to  $60^{\circ}$ C.

#### **Physical Properties**

The following are typical properties of Mergal<sup>®</sup> 530; they are not to be considered product specifications.

Appearance:	Clear colorless to amber liquid
Specific Gravity, 25°C:	1.1 - 1.3
pH (as is)	2.5 - 4.5
Solubility	Water soluble
Freeze Point	-25°C

#### **Product Highlights**

- Extremely fast-acting
- Highly effective in recovery of spoiled raw materials
- Excellent compatibility & synergy with other wetstate preservatives
- Does not destablize emulsions or dispersions
- Formaldehyde-free, non-oxidizing

#### Active Substance

20.0%	2,2-Dibromo-3-nitriloproprionamide	DBNPA	$N \equiv C \bigcup_{C \\   \\ 0 \\ 0$
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#### Function/Activity

For many applications, an initial dosage of 0.05% -0.20% of Mergal® 530 is recommended. Do not mix Mergal 530 with other additives. Mergal 530 ideally should be added to the process using a metering pump at a location where good mixing occurs. Efficient and optimum dosage for your specific system can be determined through microbiological testing.

Function	% Wt/Wt
Industrial Cooling Systems	0.01 - 0.20%
Paper Mills	0.01 - 0.20%
Brewery Pasteurizer Water	0.01 - 0.20%
Metalworking Cutting Fluids	0.01 - 0.20%
Non-potable Reverse Osmosis Systems	0.01 - 0.20%
Enahnced Oil Recovery Systems	0.01 - 0.20%
Industrial Preservation Applications	0.01 - 0.20%

#### **Formulating Considerations**

Mergal<sup>®</sup> 530 is best added early on in the manufacturing process at a point of good mixing. Based on 2,2-Dibromo-3-nitrilopropionamide (DBNPA) chemistry, Mergal<sup>®</sup> 530 is compatible with most other additives such as organic biocides, chlorine treatments, dispersants, surfactants, thickeners, corrosion inhibitors, and scale inhibitors. Mergal® 530 is formaldehyde-free and is not expected to add residual VOC to the treated product or system when used properly.

For raw material treatment, it is best added under agitation. The active ingredient in Mergal® 530 is not stable at temperatures above 40C, and will chemically degrade with a half-life inversely proportional to product pH. The half-life of Mergal® 530 in a typical end use (pH ~8) is approximately 30 minutes. High levels of Mergal® 530 can cause chemical degradation of BIT, formaldehyde-donors, and pyrithiones. Use levels of Mergal® 530 in formulations containing these incontainer preservatives should be limited to 0.05% (100 ppm DBNPA).

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<sup>®</sup> 530 is packaged in:

Package Type	Net Weight
Pail	44 lbs / 20 kg
Large Drum	550 lbs / 249 kg
Tote	2750 lbs / 1247 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

Use biocides safely. Always read the label and product information before use. All product information corresponds to Arxada's knowledge on the subject at the date of publication, but Arxada makes no warranty as to its accuracy or completeness and Arxada assumes no obligation to update it. Product and safety information is intended for use by recipients experienced and knowledgeable in the field. who are capable of and responsible for independently determining the suitability of ingredients for intended uses and to ensure their compliance with applicable law. Proper use of this information is the sole responsibility of the recipient. Republication of this information or related statements is prohibited. Information provided by Arxada is not intended and should not be construed as a license to operate under or a recommendation to infringe any patent or other intellectual property right. No claims are made herein for any specific intermediate or end-use application. The information contained in this document is proprietary and confidential. The recipient shall keep this document strictly secret using at least the same level of measures as it uses to protect its own confidential information, but in any case at least commercially reasonable own confidential information, © 2023 Arxada Ltd. but in any case at least commercially reasonable and

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