

**Description** MAXXIS biocide is a liquid, single-feed, stabilized bromine biocide for industrial water treatment applications. Product halogen activity is approximately 21% as Br<sub>2</sub>, equivalent to approximately 9% as Cl<sub>2</sub>.

**Applications** MAXXIS biocide is EPA-registered for use as a fungicide, algicide, slimeicide and microbiocide in recirculating cooling and process water systems, industrial once-through cooling water systems, and pulp and paper mills. It is also EPA-registered to control biofilm deposits from pumps, pipework, heat exchangers and filters associated with industrial water treatment systems.

This product has been formulated for the unique requirements of high-volume, large-scale industrial use.

**Specifications**

Total halogen as Br <sub>2</sub> , wt%.....	19.7 – 21.7
Appearance.....	clear yellow to clear orange liquid
pH.....	12.4 - 14.0

**Typical Properties**

Density, lb/gal @ 77 °F (25 °C).....	11.7 - 12.9
Density, g/mL @ 77 °F ( 25 °C).....	1.4 - 1.55
Boiling point, °F (°C), approx.....	223 (106)
Freezing point, °F (°C) approx.	
Summer formulation.....	45 (7)
Winter formulation.....	30 (-1)
Viscosity, cSt @ 77 °F (25 °C), approx. ....	5
Solubility in water.....	complete
Odor.....	mild

**Storage Information** MAXXIS biocide should be stored away from incompatible materials. To maximize product shelf life, the product should be stored in a cool, dry, well-ventilated area in opaque containers to minimize exposure to light and especially sunlight. As the product ages, activity is gradually lost and nitrogen pressure can build up in the headspace; therefore, the product should be stored in vented containers.

Avoid freezing, excessive heat or exposure to light, especially direct sunlight. Heating of the product above what is needed for freeze protection should be avoided as it can accelerate decomposition. Temperature monitoring is recommended. Precautions should be taken to ensure that the average temperature of the product is maintained below 110 °F (~43 °C). Please refer to the material safety data sheet for additional information.

When properly stored and protected from light, this product retains 95% of its original activity for about three months at ~90 °F (~32 °C).

## Compatibility

### Compatible

MAXXIS biocide, at its end-use concentration, is compatible with commonly used materials of construction in cooling systems. In its neat form, at ambient temperatures, this product is compatible with titanium. Hastelloy® C-276, Monel 400, vinyl tubing, high-density polyethylene, polypropylene, PVC, Viton®, Teflon®, Tygon® tubing, chlorobutyl rubber, Hypalon®, HALAR® ECTFE, Tefzel® ETFE, W.L. Gore GORE-TEX® GR, W.L. Gore UPG Style 800, and Garlock Gylon® Styles 3504, 3500, and 3510.

### Incompatible

In its neat form, this product is not compatible with Buna-N rubber, neoprene, silicone rubber, Plasite® 4300 and 3070, nylon, aluminum, brass, carbon steel, copper, stainless steel and other common metals. This product is strongly basic and an oxidizing agent. Contact with organic materials such as alcohols and aldehydes, strong reducing agents, strong oxidizers, acids, and ammonia-containing products should be avoided. Use of incompatible materials can promote the exothermic decomposition of the product. In extreme cases, this could result in vigorous gas formation and over-pressurization of storage containers.

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## Shipping Information

### Container Information

Available in bulk and totes

### Shipping Classification

Proper shipping name: CORROSIVE LIQUIDS, BASIC, INORGANIC, N.O.S.  
(Halogenated Complex, Sodium Hydroxide)

Hazard class: 8  
ID number: UN3266  
Packing Group: III  
Label/Placard: Corrosive with number 8

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## Safety and Handling Information

For specific safety, handling and toxicity information please refer to the current material safety data sheet.

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## Regulatory Information

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. State registration is required prior to sale and distribution of this product.

U.S. EPA registration number: 3377-79

*For further information, please refer to the product label, material safety data sheet, and startup guide.*

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