

# Spectrus\* NX1105

## microbiological control agent

- Reduced environmental impact
- Compatible with halogens
- Effective at alkaline pH
- Effective in the presence of sulfides
- Approved for once-through cooling
- FDA Approved (CFR 176.170, 180, and 300)
- USDA Approved (G-5, G-7)
- Approved for sale in California

### description and use

Spectrus\* NX1105 is a microbial control agent that is EPA-approved for control of bacteria, algae, and fungi in a variety of industrial, water-based systems. Spectrus NX1105 contains 45% Glutaraldehyde. Spectrus NX1105 is registered for use in open recirculating cooling systems, heat exchange systems, and evaporative condensers. This product is also approved for use in once-through cooling water systems.

Control of microbiological populations in industrial water systems is essential to prevent biofouling. In cooling systems, biofouling of heat exchange equipment and tower fill reduces heat transfer efficiency and can force unscheduled shutdowns and extended turnarounds, leading to lost production. Equipment can also be damaged as a result of microbiologically influenced corrosion (MIC) associated with biofouling. Consequently, biofouling must be prevented in order for operating units to avoid such events and achieve profitability goals.

In addition to cooling systems, Spectrus NX1105 can be used to control microbes in auxiliary water systems,

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industrial waste water systems, air washers, pasteurizers, and reverse osmosis systems.

Check the product label for a complete listing of approved end uses.

The active ingredient in Spectrus NX1105 is stable in the presence of sulfides. This makes Spectrus NX1105 a good choice for controlling sulfate reducing bacteria that are often associated with MIC. Laboratory test data indicate the active ingredient in Spectrus NX1105 is also effective against various types of iron oxidizing bacteria. These organisms, often present in well water, oxidize FeII to FeIII and/or MnII to MnIV. Iron oxidizing bacteria can produce heavy iron oxide deposits and have also been implicated in MIC.

Water-based Spectrus NX1105 is safer to handle and store than solvent-based materials. The toxicological profile of Spectrus NX1105 has been well studied. This product poses a greatly reduced health risk when compared to many other biocide products. In the environment, the active ingredient in Spectrus NX1105 undergoes natural degradation which reduces its toxicity to non-target organisms.

Spectrus NX1105 is compatible with oxidizing biocides. Alternating feed of Spectrus NX1105 with another microbiological control product (e.g., another Spectrus NX series biocide product or an

oxidizing biocide) will provide better long-term control by reducing selection of resistant organisms.

### treatment and feeding requirements

Correct treatment levels and frequency of Spectrus NX1105 addition depend on many factors. These include, but are not limited to, system cleanliness, types of microbes, nutrient concentrations, temperature, pH, retention time, and other system operating characteristics. Consult the product label for general dosage guidelines. Microbiological monitoring is recommended to evaluate product requirements. Consult your SUEZ representative for technical advice on your specific application.

In all cases, this product must be applied in accordance with use instructions on the Spectrus NX1105 label.

**Feed point** - Apply Spectrus NX1105 to a point in the system where turbulence and flow patterns assure good mixing with the water being treated.

**Dilution** - This blended product is best fed neat (undiluted) from the storage container.

**Compatible Materials** - Spectrus NX1105 is compatible with the following materials of construction: 304 and 316 stainless steel, high density polyethylene, high density cross-linked polyethylene, PVC, and Teflon. (Teflon is a registered trademark of DuPont.)

**Avoid:** Mild Steel, Copper and Copper Alloys, Galvanized metals, Neoprene, Buna N and Buna S

rubbers, Litharge Viton, Ethylene Propylene Rubber, and Hypalon.

This product may be fed using the PaceSetter\* Control system.

### general properties

Physical properties of Spectrus NX1105 are shown on the Material Safety Data Sheet, a copy of which is available on request.

### packaging information

Spectrus NX1105 is a liquid and is available in a wide variety of containers and delivery methods, including SUEZ's ChemSure\* Drumless Delivery Services.

### storage and handling

Protect from extreme temperatures. Store Spectrus NX1105 at temperatures between 40°F (4°C) and 100°F (38°C).

### safety precautions

Use of eye protection (goggles and face shield) and gauntlet-type gloves is required when handling this product. See section 7 of the MSDS for additional information on recommended personal protective equipment.

### general information

EPA Registration Number.....10352-3876-22.

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