2,2-Dibromo-3-nitrilopropionamide (DBNPA)

Properties:

DBNPA is a fast-acting, non-oxidizing biocide. It has outstanding environmental properties. It is non-persistent and degrades to naturally-occurring products. It quickly degrades to carbon dioxide, ammonia and bromide ion when in an aqueous environment. DBNPA is degraded by reactions with water, nucleophiles, and UV light (rate is dependent on pH and temperature). DBNPA provides efficient, cost-effective microbiological control at low use concentrations. DBNPA is a white crystalline solid.

- Compatible with the membrane
- Fast acting
- Cost effective
- Acceptable transportation, storage, stability and handling characteristics
- Broad spectrum control (e.g., planktonic and sessile organisms); algae control is seasonal and situational
- Biodegradable

Specification:

Items	Index
Appearance	White solid
pH of Saturated Solution	6.8
Bulk Density (loose pack poured)	approx. 0.9 g/cc
Solubility in water	max. 15%
Melting point	122 to 125 °C

Usage:

DBNPA is widely used in many occasions that are related to water treatment industries. DBNPA is also used in the water and wastewater industry as a biocide agent to kill bacteria. DBNPA is used to prevent the formation of biofilms on the membranes in the reverse osmosis process.