



## Virkon® Aquatic Bactericide and Virucide

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Virkon® Aquatic Bactericide and Virucide is an antibiotic-free system that disinfects pond water and thus controls pathogens of aquatic organisms. Unlike persistent chemicals and antibiotics that leave residues, such as chloramphenicol and nitrofurans the components of Virkon® Aquatic do not leave significant residues in aquatic organisms or their immediate environment.

Virkon® Aquatic Bactericide and Virucide contains 8 intentionally added formula ingredients, 7 of which currently enjoy approval for use in food-contacting applications under US regulations (Title 21 Code of Federal Regulations Parts 170-199-[http://www.access.gpo.gov/nara/cfr/waisidx\\_05/21cfrv3\\_05.html](http://www.access.gpo.gov/nara/cfr/waisidx_05/21cfrv3_05.html)) administered by the US Food and Drug Administration. Likewise these ingredients comply with the requirements of the US Environmental Protection Agency under pesticide law (The Food Quality Protection Act of 1996; commonly known as the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)).

Of these 8 ingredients, sulfamic acid would be the only chemical that merits mention of residue, based on the chemistry of the components utilized in this technology. Sulfamic acid has an established publicly available safety data base (<http://ecb.jrc.it/esis/CAS#5329-14-6>), and is a well-known industrial chemical with a wide range of uses including de-scaling food handling equipment and is Generally Regarded as Safe (GRAS) when used in processing of pulp and paper that contacts food. Testing has shown that when Virkon® Aquatic is applied at 1.2 ppm levels every seven days for a period of 120 days, the potential residue is present only at levels that are below a significant degree of risk. Studies have also demonstrated that at the recommended use levels, Virkon® Aquatic will successfully control bacterial and viral pathogens without being harmful to shrimp. A review of all the evidence available therefore indicates that Virkon® Aquatic is safe to use in shrimp ponds at the recommended concentrations.

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