## **Target Microorganism**

The size, biological make-up, and life cycle of a microorganism all play a critical part in successful germicidal disinfection. By way of comparison, there are approximately 65,000 known protozoa and only 4,500 bacteria, all of which require their own specific UV-C dose. A microorganism's size plays a significant roll in the UV dose required to irradiate it. Protozoa are often many times larger than bacteria and therefore require a much higher UV dose.

## Required Microorganism UV Dose (per single pass through UV Sterilizer)



Bacteria: Aeromonas Salmonicida

Bacteria: Pseudomonas Fluorescens

(fin rot)

Bacteria: Bacilus Subtilus (spores)

Fungi: Saprolengnia (zoo spores)

Protozoa: Sarcina Lutea

Protozoa: Ceratomyxa Shasta

Protozoa: Trichodina Sp.

Protozoa: Myxobolus Cerebralis

(TAMs, Whirling Disease)

Protozoa: Ichthyophthirius Tomites

(freshwater white spot)

**Protozoa:** Amyloodinium Ocellateum (marine velvet)

Protozoa: Trichodina Nigra

Protozoa: Cryptocaryon Irritans

(marine white spot)

Protozoa: Costia Necatrix

Virus: KHV (koi herpes virus)

Virus: CCV (channel catfish virus)

Virus: IHNV (infectious hematopoietic

necrosis/CHAB)

Virus: OMV (oncorhynchus masou virus)

Virus: IHNV (infectious hematopoietic

necrosis/RTTO)

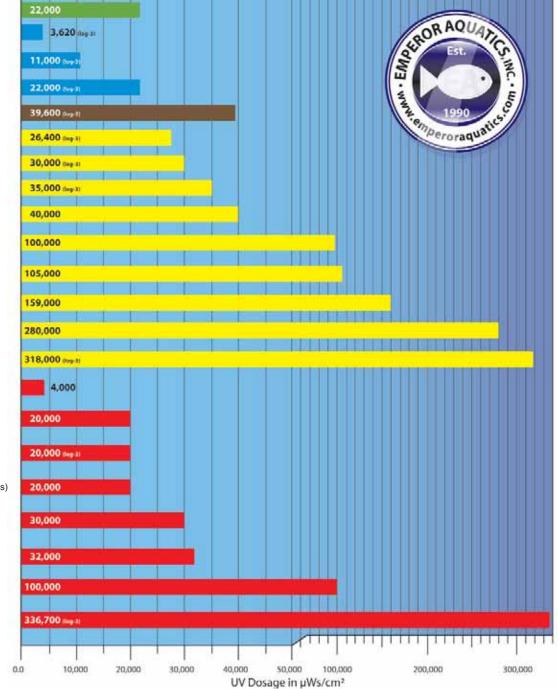
Virus: VHS (viral haemorrhagic

septicaemia)

Virus: CSV (chum salmon virus)

Virus: IPNV (infectious pancreatic

necrosis virus)





Chlorella Vulgaris



Pseudomonas



Amyloodinium



Cryptocaryon

Note: UV doses not accompanied by a specific log value should be considered "minimal dosage". The listed data was collected from various sources and Emperor Aquatics, Inc. does not accept any responsibility on the accuracy of this information. This information is meant to be a guideline and should be used as such.