

In-Vivo Toxicity Testing of TetraSILVER[®] Silver Oxide

The table below summarizes the results of rigorous testing to determine TetraSILVER safety (at 30,000 parts-per-million) for exposure to human skin, eyes and mouth. These tests were performed by an independent laboratory for submission to the US Environmental Protection Agency (EPA), which resulted in the EPA's approval of TetraSILVER silver oxide as a disinfectant for use in swimming pools.

Category IV, shown in the below table, is the EPA's highest safety rating (lowest concern for toxicity). The EPA Fact Sheet (1996) on the silver oxide states, "Adequate product chemistry, efficacy, environmental fate, toxicology and ecological effects data have been submitted and reviewed. The available data support registration of an end-use product for use as a swimming pool water disinfectant. Adverse effects to human health are not anticipated from use of this product."

Acute oral LD50 (Rat)
LD50 > 5000mg/kg
Category IV

Acute dermal LD50 (Rabbit)
LD50 > 2000mg/kg
Category III

Primary eye irritation (Rabbit)
Non-irritant
Category IV

Primary dermal irritation (Rabbit)
Non-irritant
Category IV

Acute inhalation LD50
Waived (Does not volatilize in aqueous suspension.)

Dermal sensitization (Guinea pig)
Product is not a dermal sensitizer