The Effects of Sodium Hypochlorite Solution on the Cardiovascular System of *Glycera Dibranchiata*

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Abstract

Sodium hypochlorite is a corrosive substance that is released into freshwater ecosystems daily without knowing the effects. Research was conducted on *Glycera dibranchiata* to determine if sodium hypochlorite solution had noticeable change on the cardiovascular system, since the heartbeat of this organism is easily measured. A LD50 test was performed at the concentrations; 100%, 10%, 1%, 0.1%, 0.01%, 0.001%, 0.0001%, and 0.00001%. The *G. dibranchiata* were also placed into a 0.01% sodium hypochlorite concentration for 24 hours. The results tell us that a concentration of 0.00001% is lethal to half of the population, and concentrations around 0.01% will cause *G. dibranchiata* to disintegrate. From this, it is likely that a concentration of around 0.000001% will best work for measuring sublethal effects of sodium hypochlorite on *Glycera dibranchiata.*