Purifying Water with NaCLO2 (MMS)

http://www.genesis2forum.org/index.php?option=com_kunena&func=view&catid=2&id=24115&Itemid=66

What is the application?

What specific pathogens are you targeting?

What is the amount of water you are treating?

What are you activating with?

For potable water storage...

1 gallon = 128 oz - 3800 ml

MMS is 22.4% NaClO2 - 224 grams per liter - 224000 ppm *(I know... purists)*

For potable water storage, you need 1 to 5 ppm chlorine dioxide.

For water that is in a cistern or vessel that has biofilm you need about 20-50 ppm.

For use as an algaecide, fungicide, and to disinfect water, you need 100 ppm for 10 minutes minimum contact time.

So about 1 to 5 drops per gallon unactivated NaCLO2 for potable water storage. Depends on how clean the water is.

10 to 20 drops activated NaCLO2 per gallon if you have water stored, but your tank is slimy.

These should stay good as long as they are sealed. If you open them, just retreat with the unactivated drops.

If you have to drink from the hoof print of a animal or something, you would want 30 or 40 activated drops per gallon.

You would also want to activate for a longer period of time to generate more Clo2, and you would want to wait an hour or even a bit longer before you use the water.

Citric Acid will not convert 100% of the available chlorine dioxide.

I would like to add that I am not a chemist or anything, so please don't think I'm the know all-tell all on this.

I'm just doing rough figures that covert to drops, and there is a lot of math that goes into figuring how to clean and maintain a water system.

Some critters are easily oxidized, and others aren't, and this can make a vast difference, as well as the type of activator used, whether the water is agitated, and mineral content of the water. This will clean water with bad stuff in it, and keep slime from growing in a water system, but it won't make good water better.

--Steve