



Microchem Laboratory
1107-C South Airport Circle
Eules, Texas

Rayne Guest
R-Water
2061 Clovis Barker Rd. Unit 4B
San Marcos, Texas, 78666

January 5, 2015

Dear Ms. Guest:

Thank you for your recent testing with Microchem Laboratory. As we have discussed, your product is a pesticide device, rather than an antimicrobial pesticide like most disinfectants. Accordingly, it is not subject to registration. Since it is regulated as a pesticidal device, R-Water is free to run test methods that are best suited to the device, so long as the data substantiates any claims made in commerce.

For your most recent study, Microchem Laboratory used the AOAC Germicidal Spray Products as Disinfectants Test Method, utilizing *Staphylococcus aureus* ATCC 6538. That method is recommended by EPA for traditional disinfectants. As you know, R-Water has already passed the test at a 1 minute contact time. To demonstrate differences between the two test samples, this particular study utilized a very brief contact time of 20 seconds. The purpose of the brief contact time was to enable comparison of R-water and ordinary bleach, diluted approximately 1:100 per OSHA bloodborne pathogen disinfection guidance.

The results of the study showed your product to be at least as efficacious as ordinary bleach that had been diluted 1:100. Your product killed all organisms on 6/10 test surfaces, while 1:100 diluted bleach killed all organisms on 5/10 test surfaces. These results therefore substantiate the claim that R-Water can be used for disinfection of bloodborne pathogens.

The results are not a total surprise. Bleach (sodium hypochlorite) is normally quite alkaline. At lower pH values, particularly as the pH becomes neutral or slightly acidic, the chemistry becomes mainly hypochlorous acid, which is much more potent than its alkaline cousin, sodium hypochlorite.

Sincerely,

Benjamin D. Tanner, Ph.D.