

## How The Effectiveness Of Disinfection Is Measured

When testing disinfectant efficacy on hard surfaces, we measure RLUs (Relative Light Units), an indicator of the presence of adenosine triphosphate (ATP). To do this, we use very expensive meters called, appropriately enough, ATP meters. I own multiple of these and am experienced in using them to check the efficacy of various commercial disinfectants, my own R&D solutions and the solution yielded by our tablets.

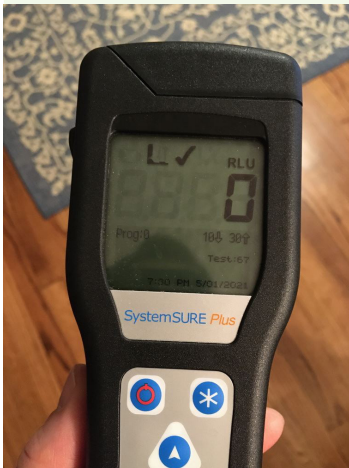
The meters utilize expensive “swabs” that are impregnated with special solution that helps with specimen collection and then reacts with the meter in such a way that the meter yields a reading of the RLUs measured from the sample. Higher RLUs = more ATP/pathogens.

InfectionControlToday: “A study by Sciortino and Giles (2012) published in the *American Journal of Infection Control* has validated that ATP testing is an effective tool for monitoring the cleanliness of hospital surfaces.”

Some extremely germey surfaces can measure in the thousands. For instance, see the photo I took of our special-needs dog’s leash when



the dog walker brought him back. Ewwwwwww.



Zero RLUs after cleaning my kitchen floor with Chlorfexis, as shown on our world-class ATP meter

Now, compare that to the reading I got after disinfecting a test area of my kitchen’s hardwood floor with Chlorfexis solution. OR-grade clean.

So you know what you’re shooting for in your facilities, here are the typical RLU ranges against which we measure when testing ATP:

0-10	11-30	31+
Pass (✓)	Caution (!)	Fail (X)

0-10	11+
Pass (✓)	Fail (X)

Re: the photos: 1120 is very germ-laden, while 0 is the best possible score.

Now, ATP meters don’t measure viruses per se. But if a surface has been so well cleaned and disinfected as to yield a 0 RLU reading, it is safe to assume that it has no viruses on it. There is an indirect correlation.

These meters are expensive and rare during the pandemic, plus the swabs are quite expensive and finicky, so I don’t urge you to run out and buy ATP testing equipment. Just use hypochlorous acid correctly and enjoy the peace of mind you get from knowing that it may be nature’s perfect disinfectant and that you’re effectively controlling dangerous pathogens in the safest, most affordable & easiest way possible.