



Log Reduction Explained

In terms of infection control, 'Log Reductions' convey how effective a product is at reducing pathogens. The greater the log reduction the more effective the product is at killing bacteria and other pathogens that can cause infections.

The highest percentage that is generally used is 99.9999%. this percentage is written as "a 6 log₁₀ reduction" or "a 6-log kill rate."

Generally used & sold disinfectants only achieve a 99% (2-log) or 99.9% (3-log) reduction of pathogens on a CLEAN SURFACE, which means for their disinfectant to work properly the surface needs to be pre-cleaned.

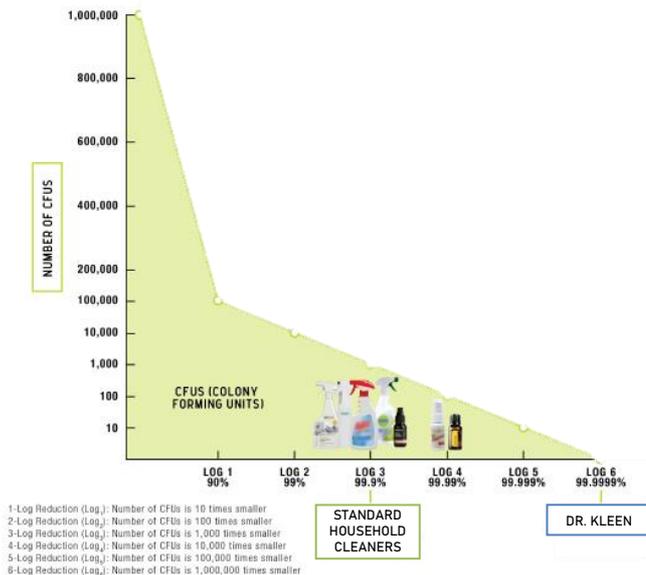
Dr. Kleen All Purpose has been tested, proven and certified achieving the highest disinfection percentage of 99.9999% (6 log) on a DIRTY SURFACE within 30 seconds to 10 minutes of application.

By choosing Dr. Kleen All Purpose and its 99.9999% effectiveness, you are choosing to safeguard your family by eliminating up to 4 x more bacteria & germs than everyday disinfectants.

These results are documented in the AOAC Germicidal Spray Test performed by Eurofins Laboratories:

QUICK GUIDE TO LOG REDUCTION

Claims must conform to dwell time instructions or result will drop



This graph shows the results log reductions have on a test area with 1,000,000 CFUs (colony forming units).

A 4-log Reduction on a surface with 1,000,000 CFUs would leave 100 CFUs, which is written as a 99.99% reduction in potentially harmful microorganisms.

'Log' is short for logarithm, which is a power to which a base, such as 10, can be raised to produce a given number. As an example, Log 4 represents 10⁴ 10x10x10x10 or 10,000. Log reduction means a 10 fold (one decimal place) or 90% reduction in CFUs.

To look at in terms of reduction of the CFUs, a reduction of 1 Log (90%) reduces CFUs on a test area from 1,000,000 CFUs to 100,000, 2 Log (99%) reduces 1,000,000 to 10,000, 3 Log (99.9%) from 1,000,000 to 1,000 with Log 6 reducing 1,000,000 down to 1 CFU.