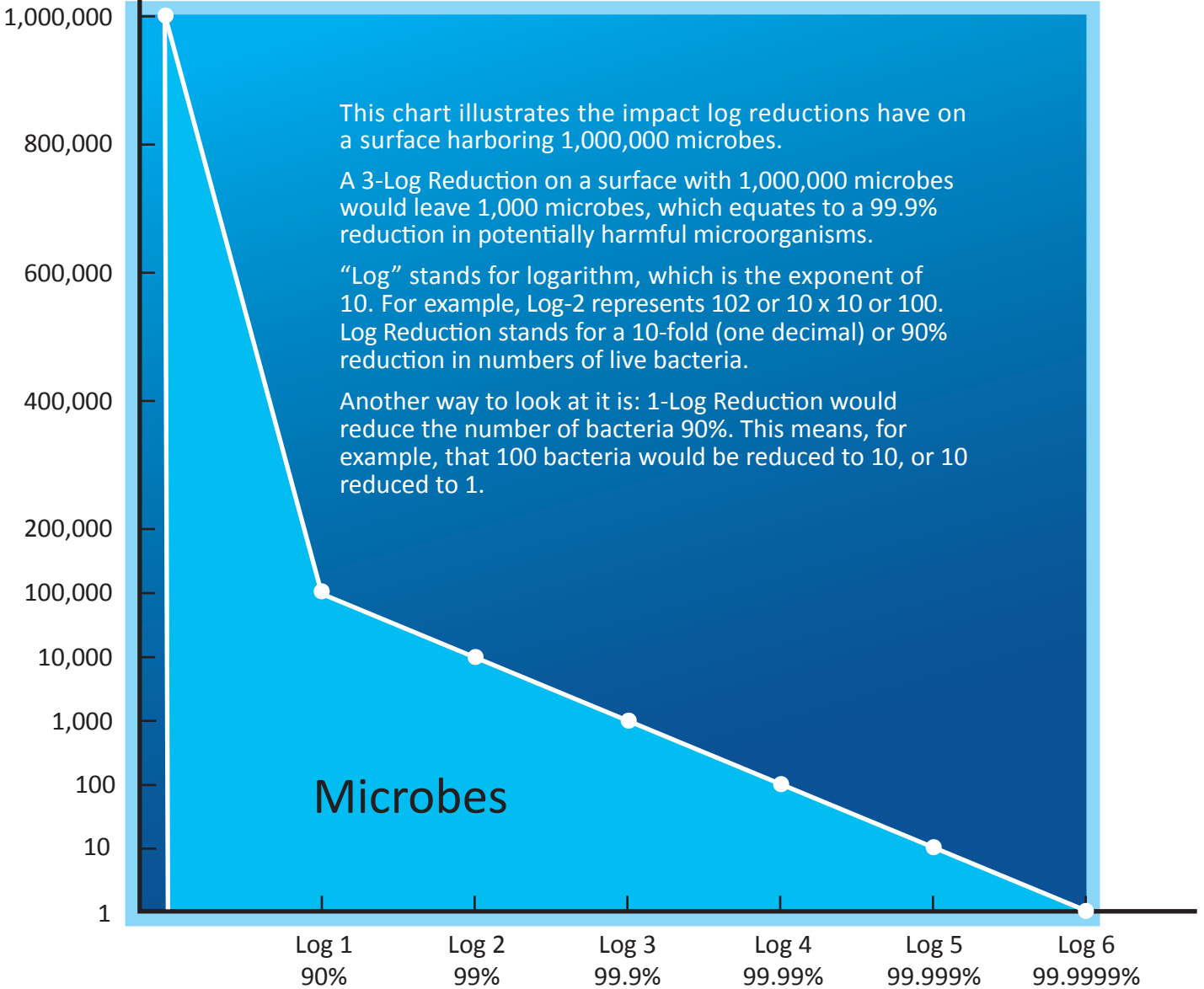


# Quick Guide to Log Reduction

Number of Microbes



This chart illustrates the impact log reductions have on a surface harboring 1,000,000 microbes.

A 3-Log Reduction on a surface with 1,000,000 microbes would leave 1,000 microbes, which equates to a 99.9% reduction in potentially harmful microorganisms.

“Log” stands for logarithm, which is the exponent of 10. For example, Log-2 represents  $10^2$  or  $10 \times 10$  or 100. Log Reduction stands for a 10-fold (one decimal) or 90% reduction in numbers of live bacteria.

Another way to look at it is: 1-Log Reduction would reduce the number of bacteria 90%. This means, for example, that 100 bacteria would be reduced to 10, or 10 reduced to 1.

Microbes

- 1 Log Reduction: Number of germs is 10 times smaller
- 2 Log Reduction: Number of germs is 100 times smaller
- 3 Log Reduction: Number of germs is 1,000 times smaller
- 4 Log Reduction: Number of germs is 10,000 times smaller
- 5 Log Reduction: Number of germs is 100,000 times smaller
- 6 Log Reduction: Number of germs is 1,000,000 times smaller



\* Alpet D2 kills 99.999% of tested microbes  
 \* Alpet E3+ kills 99.9999% of tested microbes

