

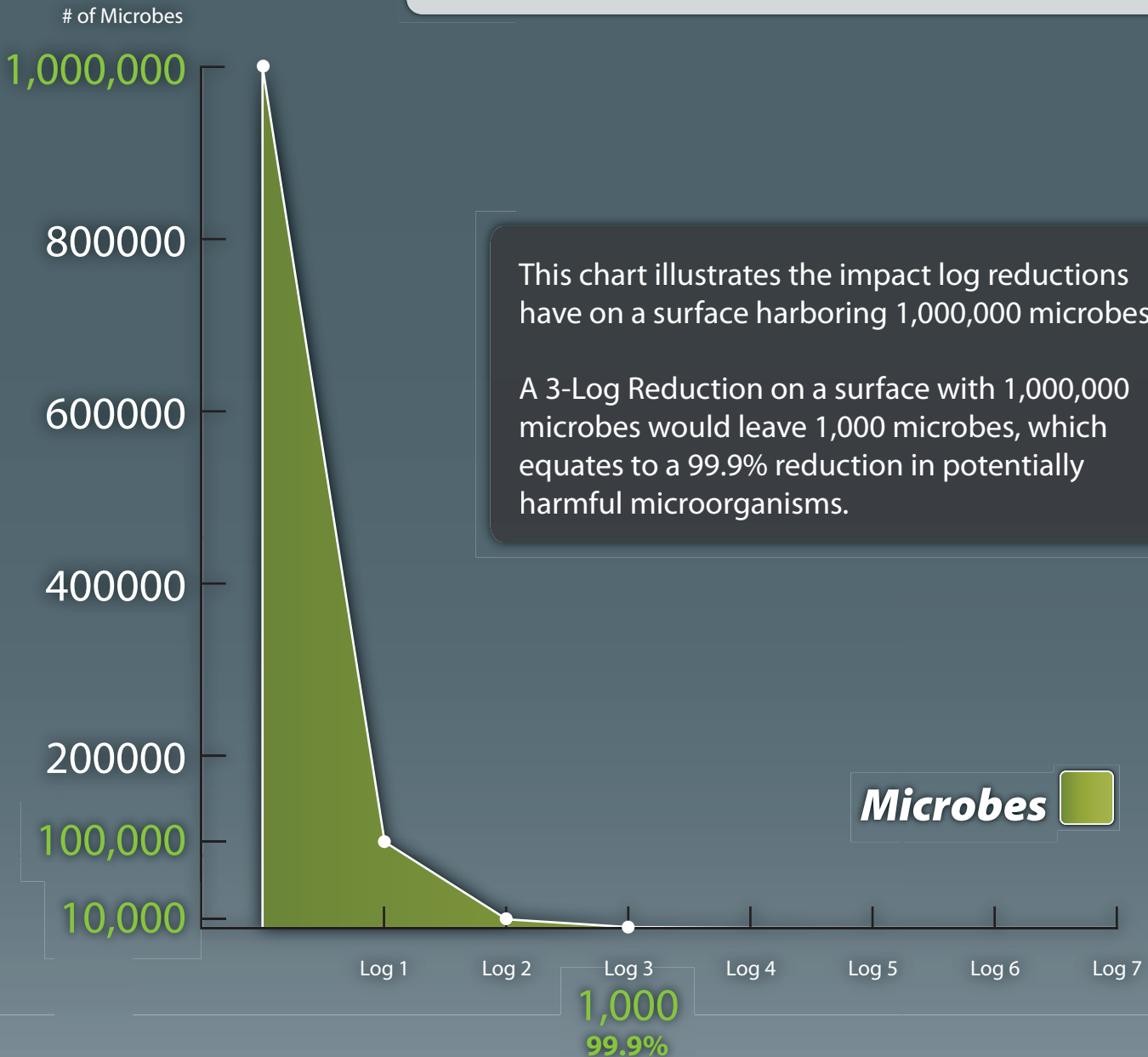
# Log Reduction Fact Sheet



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“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.



## Quick Guide to Log Reduction

- 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 1000 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
- 7 Log reduction: Number of germs is 10,000,000 times smaller