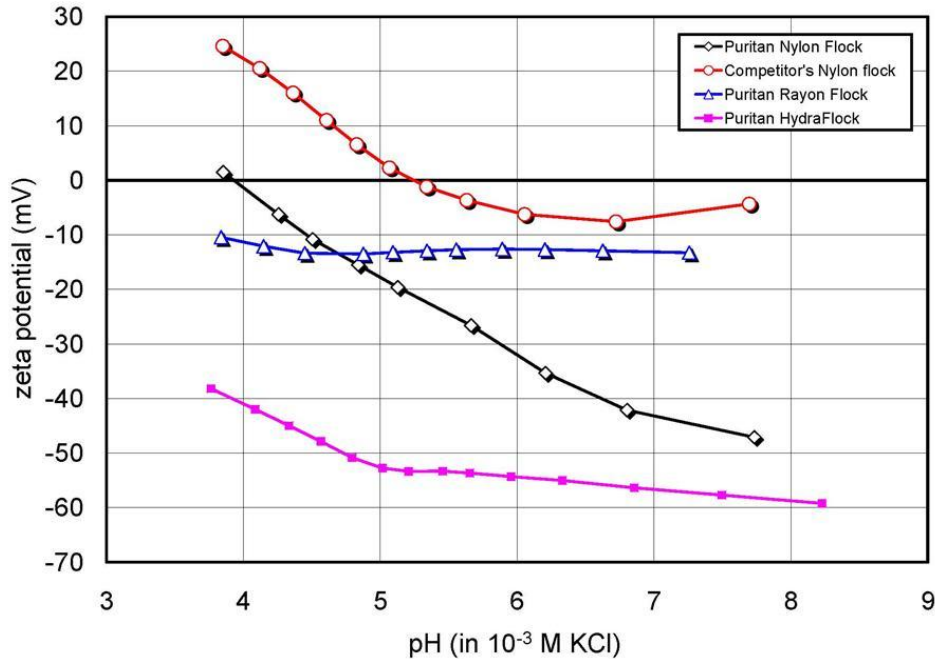


# Zeta Potential testing of swab fibers reveals Puritan flock swabs outperform competitors

The below physical characteristics of swab fibers are in the favor of Puritan Medical Products and demonstrate superiority of both nylon flocked swab and Hydraflock®. The results are supported by culture studies performed and evaluated by two independent labs in 2009 and 2010.



Significant differences in zeta potential (ZP) pattern and values can be found between nylon fibers of Puritan and a competitor's. At neutral pH (7.0), the ZP of nylon of Puritan is 5.5 times higher than the ZP of the same fibers of the competitor's. Additionally, the ZP of the competitor's nylon does not show dramatic variation in the pH range of 6 to 7.5; on the other hand, ZP of Puritan nylon fibers increased from -32 to -45 in the same pH range, suggesting differences either in fiber composition or surface coatings between both fibers. Higher ZP results in increased repulsion between fibers and gives a true flock like appearance in solution leading to improved release of organisms.

Rayon fibers show no significant in ZP as a function of pH although the ZP values at any given pH are higher than those exhibited by nylon fibers of the competitor's.

HydraFlock fibers exhibited modest difference in ZP in the pH range of 5 to 7.5 (-52 to -58); however, they had the highest ZP, suggesting increased repulsion between fibers and gives a true flock like appearance in solution leading to improved release of organisms.