Flammability of Fabrics

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The purpose of this project is to test out what each softener could do to flames and what changes could be done from the burning. From this we can also determine the safety of each detergent and which detergent gives us the most reliable solution. With this experiment, we can see which detergent we shall most likely avoid, since flammability is a danger to all of us. Not every detergent is safe for use, and this experiment will only prove so. As tested, we noticed that the detergents that had high rates of perfume were more flammable and they didn't take much time to burn. It was actually very dangerous the smoke was unbearable. We realized that with the detergents the materials did become highly flammable and that when they aren't washed, they take more time. It's safe to say that polyester is one material to avoid since it had the lowest time of burning to shreds, which is a danger to people, especially in situations where fire is inevitable. Wool had the slowest burning rate and therefore, is considered the safest option.

Awards Won:
Qatar Foundation, Research &amp Development: Award of $1,000