

Shane Johnson
To Burn or Not To Burn

The purpose of this investigation was to discover the material (nylon, muslin, gauze, matte board, plywood) that withstands fire the longest when Roscoflamex is applied. I hypothesized if the materials are compared in flammability then nylon when Roscoflamex is applied will decrease the flammability for the longest period of time.

The experiment involved applying six different chemicals (Roscoflamex NF, DF, SF, PC, and WD) to six different materials (muslin, nylon, gauze, matte board, and plywood) and measuring the destruction using a burning scale (0-5). The materials without any chemical were considered the control. The burning scale destruction was measured after the five minute time period to burn. Whatever was left of the materials was helpful to determine the scale of each material.

The data collected did not support the original hypothesis. The average material burning scale for muslin (with chemical) was 3, for nylon 3, for gauze 2.67, for matte board 3.34, for plywood 2.67, (control) for muslin 4.67, for nylon 3, for gauze 5, for matte board 4, for plywood 2.67. The data shows that the nylon with Roscoflamex did not resist burning for the longest period of time.

These findings lead me to conclude that the chemical applied to the materials had no statistical difference evident and did affect the rating scale for the materials.