

Abstract

This paper describes the process undergone by four undergraduate biomedical engineering students during their senior design courses. The medical device created will be inserted into deep wounds and will prevent death from hemorrhaging. The device has two parts: the applicator and the sealant (figure 1 and 2). The applicator is made from sterilized plastic and resembles a tampon applicator. The sealant consists of a cotton wad inside the applicator (figure 2). The cotton is coated with a zeolite compound that aids in blood clot formation. The zeolite compound is hypoallergenic, does not cause skin irritation, and does not pull out blood clots upon removal. The sealant will remain in the wound until removed by medical professionals and will leave no residue. Below are individual pictures of the Armadillo Medical Devices team: Megan Taflinger, Sydney Maben, Rebecca Haverkamp, and Molly Carlson

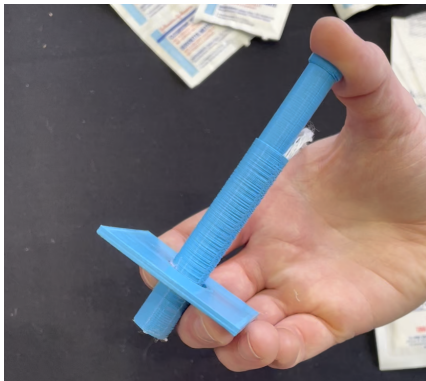


Figure 1: Deep Wound Sealant Device



Figure 2: Cotton Insert

