

QuikClot® 1st and 2nd Generation Zeolite Products

The Technology Behind QuikClot's 1st and 2nd Generation Hemostasis Products

The Key Ingredient: ZEOLITE

How a mineral can stop bleeding rapidly

QuikClot's first and second generation hemostasis products are based on a mineral called zeolite, a naturally occurring mineral material. **Zeolite has many fascinating properties and has applications in many areas, such as in detergents, as a water softener, in insulated glazed windows, where it prevents condensation, as well as packaging in supermarkets to preserve food freshness.** One amazing property of zeolite is the tremendous surface area that is found in a small volume of material. One teaspoon of zeolite provides a surface area equal to that of a football field.

Nature provides us with wonderfully redundant systems when it deems a system important to our survival. Certainly, keeping our blood inside our body where it belongs is one of those things important to our survival. Our bodies have multiple complex systems to help make sure this happens. The two main systems are platelet activation and the coagulation cascade. QuikClot brand zeolite based products work in both these systems to accelerate the clotting process.

Zeolite has the ability to activate platelets and activated platelets help stop bleeding by forming a plug. This occurs in conjunction with the body's own mechanisms of platelet activation, which occur whenever there is an injury to a blood vessel.

Furthermore, QuikClot zeolite products adsorb water from the blood. Water is trapped in the zeolite and held there by the charge within zeolite pores, zeolite framework and hydrogen bond formation.