

GSC - What is Pepper Spray?

The active ingredient in pepper spray is a naturally occurring substance called Oleoresin Capsicum or "OC". OC is an extracted resin produced from below the stem of cayenne peppers. OC is the ingredient that causes the results pepper spray is known for. They take the OC concentrate, mix it with an inert gas for dispensing purposes and inject that into the dispensing canister.

How is pepper spray rated?

- Pepper spray is rated in SHU (scoville heat units) or percent of SHU. For example if a unit is rated 10% of a 2 million pepper it should have a 200,000 out of nozzle scoville heat units. 10% of a 3 million pepper it should have a 300,000 out of nozzle heat units. Don't be fooled, a lot of brands use high numbers on their labels to get you to buy; however the heat units and percentages they state don't come out in true in independent laboratory testing. Heat wave pepper spray units are the best on the market, there stated units and percents actually test true.

How is pepper spray dispersed?

- The public can purchase pepper spray with three different types of dispersal methods; foam, fogger, and stream.
- Foam: Foam unit's spray out a shaving cream like consistence foam, in a wide angle cone. The heavy weight makes blow back less likely than the fogger unit. It is rumored that the foam can wipe it off and keep coming; that is completely false, the affects are immediate.
- Fogger: Fogger units spray a fine mist of particulates over a wide area making it easier to hit multiple assailants (the impact on multiple assailants won't be as affective); however it doesn't have the distance of foam or stream, and blow back can be an issue.
- Stream: Stream units shoot straight out like a water gun giving you the most distance of the sprays and the most concentrated solution upon impact. When using the stream unit you should spray a fan pattern to assure accuracy. Stream units are the best units to avoid blow back.

What are the physical effects of pepper spray?

- Pepper spray is an inflammatory agent with three physical effects that may be experienced. The first effect is experienced with the eyes; the eye capillaries dilate causing instant temporary blindness, involuntary tear production, and a strong burning sensation. Impaired vision may

also cause the body's equilibrium to be off creating balance issues. The main effect takes several minutes to diffuse, with some effects lasting considerable longer depending on the action taken.

- The second effect affects the respiratory system causing the throats lining to swell restricting oxygen flow to low levels, taking the ability to fight or sustain physical force away. Other symptoms include gasping for air, paralysis of the larynx, coughing uncontrollably, and gag reflex.
- The third effect attacks the integumentary system, specifically the epidermis layer or outer layer of skin. It causes an intense burning sensation and rash. The duration of irritation and rash depends on each individual's skin sensitivity.

How do you wash off pepper spray?

- First, remove any contaminated clothing, so you don't recontaminate yourself after washing. Wash your hands repeatedly to decontaminate them. About 8 times. After your hands are decontaminated use a vinegar and baking soda mixture (oil free soap and water if you don't have vinegar and baking soda) to gently pat the other affected areas. Rubbing, using lotions or oil based soaps cause the OC particles to move deeper into the skin prolonging the discomfort. However there is no real affective way to remove pepper spray besides time.