

BruTab 6S

How NaDCC Works – How it differs from traditional Hypochlorite Bleach

The active ingredient in BruTab 6S is sodium troclosene or sodium dichloroisocyanurate (NaDCC).

While BruTab 6S does provide chlorine for disinfection purposes, it is not a hypochlorite as is traditional bleach. There are significant differences that need to be understood to differentiate the two product types.

Sodium hypochlorite in bleach is often stabilized with caustics and as a result, it has pH of 11 or higher. Sodium Troclosene on the other hand has pH of ~ 6.5 when dissolved in water.

Once in solution, Sodium Troclosene releases only 50% of its total chlorine content as free available chlorine (FAC) which is the active disinfection agent. As the free available chlorine gets consumed, it continues to release the remaining chlorine to maintain the free available chlorine in the solution and hence the disinfection power. Sodium hypochlorite, on the other hand, releases all of its chlorine content as free available chlorine at once. So once they are consumed, there is no replenishment.

Furthermore, free available chlorine exists in two forms: hypochlorous acid (HOCI) and hypochlorite ion (OCI). Study shows that hypochlorous acid has four times more disinfection power than the hypochlorite ion. This is because HOCI is more similar to the water molecule (HOH) and it is easier to penetrate through the negatively charged cell wall than the hypochlorite ion (OCI). 90% of the free available chlorine produced by Sodium Troclosene at pH ~6.5 exists in hypochlorous acid form. Less than 3% of the free available chlorine produced by sodium hypochlorite (bleach) at a pH 11 or higher exists in hypochlorous acid form.

These differences will lead to unique advantages of BruTab 6S:

- Delivers more potent disinfection power, in the form of hypochlorous acid, than bleaches
 Strong and cost effective
- Has long lasting, available chlorine in reserve. Bleach does not. Diluted solutions of Sodium Troclosene generate killing power for a week. Diluted solutions of bleach become inactive after a day.
- Sodium Troclosene in tablet form is stable for 3 years. Bleach concentrates have a 6 month shelf life.
- Sodium Troclosene is far less corrosive than bleaches due to neutral pH = Surface/User friendly