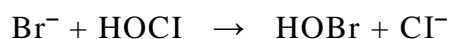




The chemistry of Ym-Fab Nylate™® is really bromine chemistry despite the presence of chlorine.

When Ym-Fab Nylate™® reacts with water we have two active's present:-
(Hypochlorous acid) HOCl + HOBr (Hypobromous acid)

The breakdown products of Ym-Fab Nylate™® are the chloride and bromide ions or salt as Cl⁻ and Br⁻. The bromide ion is reactivated by the chlorine in another dose of Ym-Fab Nylate™® to form more Hypobromous acid HOBr.



This is the basis for the bromine chemistry claim.

pH EFFECT

At this point we examine the effect of pH on both Ym-Fab Nylate™® (bromine) and chlorine systems.

TABLE 2 – EFFECT OF pH ON CHLORINE AND BROMINE

pH	CHLORINE % HOCl	BROMINE % HOBr
7.0	75	99
7.5	48	93
8.0	22	83
8.5	9	55
9.0	3	28

The above table indicates two potential pitfalls with chlorine systems.

1. If we encounter water from bores, dams or river supplies there is every chance of a high pH ie above 8.0: eg Murray river at Robinvale the pH is 8.2.
2. Continual heavy doses of chlorine with sodium hypochlorite and calcium hypochlorite raise pH as the sodium and calcium components are very alkaline. The chlorine is used up but the alkali remains.

T

ABLE 3

***EFFECT OF CHLORINE DOSE ON pH USING
DISTILLED WATER WITH SODIUM HYPOCHLORITE***

Chlorine PPM	0	1	2	5	10	20	50	100
pH	7.0	7.1	7.6	8.6	9.3	10.0	10.7	11.0

NOTE:

It is important when considering any disinfectant that the effects of that chemical on incoming water used to wash fruit and vegetables is considered.

TABLE 3 illustrates the effect chlorine has on pH when used in water. The organic loading and changing quality of incoming water must also be considered. Ensure you have all the facts before choosing any disinfectant. Understanding chemicals is essential and how they interact with other chemicals will equal clean safe produce.