



Australian Government

Department of Agriculture,
Fisheries and Forestry

REFERENCE

Sodium hypochlorite treatment of seed

Chlorine-containing compounds are described as having a certain percentage of "active" (or available) chlorine. It is the active chlorine in these products that kills microorganisms. The amount of active chlorine is usually described as a percentage and differs from one product to another. Sodium hypochlorite is available as Milton® solution (1 % sodium hypochlorite) or domestic bleach (typically between 4-5 % sodium hypochlorite). You can use a concentrated solution to prepare a chlorine solution of the required treatment concentration by using the following formula:

[% chlorine in liquid bleach divided by target %] - 1 = parts of water for each part* of bleach

Example: To make a 1 % sodium hypochlorite solution from a 4 % chlorine concentrate, you must use 1 part chlorine and 3 parts water: [4 % divided by 1 %] - 1 = [4] - 1 = 3 parts water for each part chlorine

* "Parts" can be used for any unit of measure (e.g. millilitres or litres) and could even represent a defined unit of measure (e.g. container).

The treatment solution must be prepared fresh before the treatment of seeds and discarded after a single use. Once the treatment solution has been prepared, it is important to perform the treatment according to the following procedure:

- The agitation of the seed in solution must be undertaken to obtain uniform cleaning and sterilisation.
 - After treatment, the seed must be thoroughly rinsed, with constant agitation to remove all traces of bleach that could damage the seed.
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