





SICO POTASSIUM PERMANGANATE IN POULTRY FARMING

Code N° CD28

Potassium Permanganate is a powerful, versatile and efficient oxidizer, used in a wide spectrum of industries for many different purposes. It is also used for disinfection of sheds, stables, caves and cold storage rooms in farming and livestock breeding. The use of **potassium permanganate** has clear advantages over other commercial disinfectants. Above all, it is much more active, and therefore more efficient and economical.

Application should be as follows:

The shed to be disinfected must be empty and clean, and as far as possible, all openings to the outside closed, to ensure gas retention for as long as possible. The procedure works better in a humid atmosphere (60% relative humidity or higher), achieved either by water spray or steam injection, where possible.

Potassium Permanganate should be packed in the adequate doses (see below), in small paper bags. In glass or metal containers, laid out in a regular pattern (one for each 50 cubic meters or 1764 cubic feet) a 40% by volume formaldehyde solution is poured.

The paper bags containing the **potassium permanganate** are dropped (one per container) into the formaldehyde. The paper bags retard the initiation of the reaction between the **potassium permanganate** and the formaldehyde, that can be very vigorous, to allow the operator time to leave the premises.

The **potassium permanganate** oxidises the formaldehyde (or parafomaldehyde) to CO₂ and water, being itself reduced to MnO₂, generating heat and formaldehyde and water vapors.

The reaction is accelerated by high air temperatures and relative humidities (25-30 degrees Celsius / 77-86 degrees Fahrenheit and over 60% respectively).

The gas is left to act for a span from one to three hours, and thereafter the shed must be thoroughly ventilated. To eliminate all traces of formaldehyde, ammonia hydroxide solution should be sprayed.

Dosage by cubic meter (35.31 cubic feet): 20/40 gr (0.7/1.4oz) *potassium permanganate* and 40/80 cm³. (2.44/4.88 cubic inches) of 40% by volume formaldehyde solution, depending on the intensity desired.

This procedure is recommended for the disinfection of any large hall, shed, table, cave or cold storage room, in poultry farming, livestock breeding, mushroom growing, fruit and produce stocking and distribution.