

## FORMALIN AEROSOL GENERATOR FOR FUMIGATION

It is well known that in a natural accidental wound or surgical wound, sepsis can occur on contact with contaminated materials including water. Nature contains infinite varieties of microbial organisms, broad classification being fungi, bacteria, viruses and spore-bearing organisms like tetanus. Host immune system and virulence of given species of microbes will determine the severity of infection. In any case surgical sepsis has to be avoided at all costs because of high mutability and or mobility of infection takes place. In case of Orthopaedic and Ophthalmology it may mean total loss of joint or eye. Fortunately most of the pathogenic organisms (not all organisms are pathogenic) are easy to kill outside the body. Once inside the body, microbial resistance to antibiotics, host mechanisms etc. restrict use of powerful physical agents that can be applied out of body.

During any surgery, minor or major, severing of skin and other tissues is necessary. This opens up the natural defense of the body. Sepsis can occur through surgical instruments, gloves, gauge pieces, implants, foreign bodies etc. Proper sterilization of all instruments therefore is mandatory. Apart from instruments and implants that directly come in contact with surgical wound, operation area atmosphere is equally important. Hence the emphasis on fumigation. Formaldehyde has been the most widely used fumigant since considerably long period and proved to be an excellent lethal agent to most of the pathogens, AIDS virus, fungi and spore-bearers. To achieve this the following concentration for volume fumigation is necessary:



**0.1 Parts Per Million, i.e. 40 ml of 40% Formalin & 60 ml water for an OT of 10' x 10' x 10'  
Use proportionally larger quantity for larger area.**

It is well known that larger the area of contact, better is the cidal effect on microbes. Thus, smaller the particle size, more the surface area and faster the sterilization. Particle size of formaldehyde coming out from the machine is smaller than 0.5 micron, thus increasing contact area by hundreds of thousands of times. Our machine does this job excellently, properly and at low cost. After fumigation, (6 hours) a small amount of liquor ammonia may be spread in OT. This will help to remove formaldehyde present in atmosphere, causing burning of eyes. It will also deodorize the OT. The Ammonium formate thus formed is also good antiseptic and settles on the walls and ceiling and other surfaces, thus perpetuating the cidal activity.

**THE MACHINE IS EASY TO USE. JUST ADD 40 ml OF 40% FORMALIN SOLUTION & 60 ml WATER.  
SWITCH ON.**

**MACHINE WILL SWITCH OFF AUTOMATICALLY.**

**(ONCE FORMALIN IS OVER, MACHINE IS SWITCHED OFF INTERNALLY AND WILL NOT CONSUME ANY  
POWER THEREAFTER)**

**GOLD DORES ELECTRONIC MEDICO SURGICALS PVT. LTD.**

4, Deep Darshani, Liberty Garden, Malad West, Mumbai - 400 064. Tel. No. 91-22- 8824702