



## Example : MOSQUITO CONTROL

### Calculation of total fogging mixture for one hectare

Chemical formulation (oil or water-based)  
according to the recommendation  
of the producer of the chemical agent = x grams or millilitres or ccm

+ water or oil carrier substance = y millilitres

+ Anti-evaporation agent emulsifiable  
with water (only in case water-  
based chemical formulations  
are used which do not already  
contain such an agent) = 5 % of the total mixture z

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TOTAL MIXTURE : z litres for 1 hectare

Cold fogging method : z = 0,5 – 2 l for one hectare,  
FONTAN Mobilstar, Portastar types

Thermal fogging method : z = 3 – 6 l for one hectare,  
SWINGFOG SN 50 types  
z = 1 – 3 l for one hectare,  
SWINGFOG SN 81, SN 101 types

#### Note :

The addition of an anti-evaporation agent is not necessary in case oil-based chemical formulations or water-based chemical formulations, which already contain an anti-evaporation agent in their original formulation, are used.

There is no significant difference with regard to the droplet spectrum in the application of oil-based and water-based chemical formulations in the cold fogging method with ULV aerosol generators. In the thermal fogging method however, there is a big difference between the application of oil-based and water-based chemicals with regard to the droplet spectrum. Oil-based formulations are rather ideal for thermal fog application, and a droplet spectrum of 0 to 50 microns can easily be achieved with good quality machines. When applying water-based formulations, using water as a carrier, the droplet spectrum is much wider (up to 150 microns and more) which means that a big portion of the chemical formulation is wasted, and therefore the usual dosage is not correct, because all droplets which are bigger than 50 to 60 microns are falling out and settling down in the immediate surrounding of the machine. This disadvantage can be avoided by using so called "high performance fogging tubes" for water-based formulations which are available on the market, instead of the standard fogging tube for oil-based formulations. With such a special fogging tube, a droplet spectrum which is almost identical with the spectrum of an oil-based formulation can be produced also with water-based formulations.

#### **Important note:**

A high performance fogging tube for water-based formulations must never be used when applying oil-based formulations.