Choosing the correct concentration

When testing the effectiveness and practicality of a silicone foam control agent from Dow Corning, a good starting point is to add the foam preventive to the foaming medium at a concentration of 10 parts per million active polydimethylsiloxane (the highest level allowed under FDA regulations). Then work down, if necessary, to the level of foam control desired. Any limitations on use in standardized foods should be observed.

Note: The FDA limit for use in milk is zero parts per million.

The recommended starting concentration for each product is given in the General Antifoam Product Information table.

Use this formula to calculate how much silicone foam control agent should be added to achieve the recommended ppm level:

Calculate:

$$\frac{(\text{ppm silicone}) \times (\text{Amount of Solution to be Defoamed}_{1})}{(\%\ \text{Active Ingredient in Foam Control Agent}_{2}) \times (10.000)} = \text{Antifoam to be Added}$$

1 Measure amount of antifoam added and solution defoamed in the same units; litters, gallons, pounds, etc.

2 Insert " 10 " for 10 percent active, " 30 " for 30 percent active, etc.