

Cory Stevens

Saline formulation for Instrumental Insemination of Honeybees

Simple Saline Solution- 100 ml.

100 ml. distilled water
1.0 g. sodium chloride
0.25 g. dihydrostreptomycin or gentamicin

Water Source

The water source used to make up solutions is important. Use double distilled water. When mixing or storing semen it is best to use HPLC (high pressure liquid chromatography) water.

Ph

The pH should be adjusted to 8.6. If the pH is too high use dilute HCL to adjust. If the pH is too low use NaOH to adjust.

To Sterilize

Bacteriological filtering is recommended. Use filter with a pore size of 0.2 um. Solutions can also be sterilized by heating to 350 F for 30 minutes. Note that heating will denature the antibiotic, add this after the solution has cooled.