Use of 50% Potassium Sorbate Solution To Preserve Colostrum

Purpose:

This document describes the procedure for the use of 50 % Potassium Sorbate solution for addition to colostrum to inhibit bacterial growth.

1.0 Materials:

Potassium sorbate (food grade) 50 % solution (shelf life six months) Colostrum Clean storage container Refrigerator / Freezer

2.0 **Precautions:**

- 2.1 Colostrum already inoculated by bacteria will remain contaminated regardless of the addition of potassium sorbate. This additive only inhibits growth.
- 2.2 The potassium sorbate solution must be mixed well with the colostrum in order to be effective. Dumping the solution into the top of a container without mixing will reduce its ability to inhibit bacterial growth.
- 2.3 Current estimate of inhibition period at 4°C is seven days.

3.0 Procedure:

- 3.1 Estimate the quantity of colostrum to be treated.
- 3.2 Estimate the quantity of 50% potassium sorbate solution to be added at the rate of 20 ml per 2 litres of colostrum.
- 3.3 Add 50% potassium sorbate solution to colostrum as prescribed above.
- 3.4 Add the potassium sorbate as soon as possible after the colostrum is milked from the cow. This will inhibit bacterial growth before the bacteria numbers get large enough to make calves sick.
- 3.5 Thoroughly mix the solution with the colostrum to maximize its effectiveness.

More information on bacteria controls for colostrum and the use of potassium sorbate may be found in a paper entitled, "Microbial Hazards Associated with Feeding Colostrum" by Dr. Sandra Godden.

Click <u>HERE</u> to access this resource. Or, paste this URL in your Internet browser, <u>http://www.dairyweb.ca/Resources/SWNMC2009/Godden.pdf</u>.

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