4 FREEZING POINT

Adulteration of milk refers to the addition of a substance to the milk, which negatively affects its quality. One main concern with pooled milk is the addition of water to the milk, which is generally done unbeknownst to the producer. However, addition of water may be unusual – rather the larger risks are listed below:

- Malfunction of the bulk tank and pipeline cleaning system
- Freezing of milk in the bulk tank
- Washing of buckets but not properly drying before filling with milk.

Excess water in the milk is monitored by using freezing point, or cryoscope measurement. The freezing point is measured in degrees Hortvet or Celsius. Research by the International Dairy Federation found the average freezing point for sheep milk was -0.545°C (-0.49 to -0.584).