

Revitalizing nutrition & health

BLUE LITE® C-For CALVES

Acidified electrolyte to maintain hydration for calves prior to weaning.

INTRODUCTION

BlueLite C is an aromatic, flavored electrolyte rehydration formula in combination with multiple sources of readily available energy specifically designed for the young calf prior to weaning. The acidifying action of BlueLite C makes it ideal to use with whole milk or milk replacer as it does not inhibit clot formation of milk solids like many alkaline products. BlueLite C mixes easily with milk, milk replacer and water, facilitating its use when fed via a pail, nipple bottle or through an esophageal feeder.

ACIDIFICATION ACTION

BlueLite C, in addition to providing a multiple source of electrolytes and energy, is an acidifier specifically designed for use in calves when their primary source of nutrients is whole milk or milk replacer. To illustrate the acidifying action of BlueLite C, mix two ounces of the product with eight to twelve ounces of 3.5 percent milk and stir with a spoon. Within two to three minutes, the whole milk solids will coagulate or curdle, helping facilitate their digestion and assimilation by the young calf. Young calves have a juvenile or very limited digestive capacity, and as such cannot utilize large quantities of milk at one time. By adding BlueLite C to the milk or milk replacer, the calf receives additional or supplemental curdling and acidifying fortification to help digest milk solids. Many alkaline calf rehydration products actually inhibit curdling or coagulation, therefore, they are not recommended to be fed with milk or milk replacer.

BlueLite C not only provides gentle acidification action, but it is not irritating compared to many alkaline products that are not buffered. The irritating or burning action of many alkaline rehydration products is self-evident when stirred or mixed by hands that may harbor open cuts or wounds.

HEALTH - FLUID ELECTROLYTE, ENERGY RESERVES

Water or tissue fluid represents over 75 percent of the young calf's body weight. Older calves or mature cattle have a lower percentage body fluid because of greater concentration of solid tissue mass. This higher fluid content in the young calf predisposes it to quicker and more severe dehydration or shrink than encountered by the adult bovine when exposed to the stress of handling, hauling and disease.

Electrolytes serve as the primary way in which the body balances its fluids in the three compartments of the body where the fluid is held. Through the electrolytes and their osmotic pressure, the body fluids are maintained at proper levels or balance between intracellular fluid within the cells in relation to the fluid of the interstitial tissue outside the cells and blood vascular fluid. Without adequate water and electrolytes, the body cannot maintain its proper fluid balance between the compartments and the tissues start to wither or dehydrate.

Young calves require a constant source of readily available energy as they have less energy reserves than the older calf or adult bovine that carries vast energy reserves in the form of



WHEN TO USE:

- To reduce shrink and dehydration in young calves
- Feed to purchased calves to help with transition
- Add to water for added energy in summer and winter months

FEATURES AND BENEFITS:

- An aromatic blend of pH adjusted electrolytes and multiple sources of energy compatible with milk formulated for young pre-weaned calves
- Enhances digestion of milk - provides coagulation action of milk solids for efficient utilization by the young calf
- Easy to use. Just add to milk, water or milk replacer, or administer via drench or esophageal feeder
- Cut losses of dehydration by 4-10 percent in extensive field trials

body fat. The young calf, with little body fat, has a very limited source of energy to call on from the blood and liver. These blood and liver reserves are frequently depleted in 24-48 hours following stresses that result in dehydration. Calves suffering from diarrhea quickly lose their reserves of energy and develop hypoglycemia (low blood sugar) which is evidenced by listlessness and depression. Calves in this condition require both a readily available source of energy and electrolytes in ample volumes of fluid to avoid further depression which, if not corrected, leads to coma and death.

Calves losing 5-8 percent of their body fluid and electrolytes as a result of dehydration encounter impaired growth and tissue maintenance. Fluid losses equaling 10-15 percent of the body weight result in severe tissue damage and may result in death if not corrected. Enteric infections caused by viruses and E. coli can quickly dehydrate the calf as fluids are lost via the stools through hypermotility of the digestive tract.

FIELD TRIALS

BlueLite C has been field tested on farms raising calves born on the farm and on farms where young calves were purchased and moved onto the farm. In a field trial where 34 calves were bought and moved onto the farm, the 17 calves fed BlueLite C rehydrated by 2.3 percent of their body weight in 48 hours and 5.8 percent after 96 hours. The control calves did not receive BlueLite C and rehydrated by only 0.2 percent after 48 hours and 2.4 percent after 96 hours.

In a series of comparative evaluations regarding the rehydration value of BlueLite C, the body weights of calves suffering from dehydration and scours were recorded to determine the value of extra fluid feeding or intake. In these trials, calves were given milk replacer in the morning and evening and an additional feeding of water at noon equal to the amount of fluid fed in the morning or night. Calves receiving BlueLite C in all three feedings rehydrated by 10.2 percent of their body weight after 48 hours, while the control calves not receiving the BlueLite C rehydrated by 6.3 percent. These comparisons indicated that dehydrated calves would benefit by both the feeding of BlueLite C and the additional fluid.

DIRECTIONS FOR USE FOR CALVES 80-100 POUNDS

1. To help prevent dehydration for calves fed twice a day, feed the following mixture:

2 quarts of water	2 quarts of whole milk
1/2 pound milk replacer	2 ounces BlueLite C
2 ounces BlueLite C	

2. For severely dehydrated calves, feed the following mixture four times a day:

1-1/2 quarts of water	1 quart of whole milk
1/4 pound milk replacer	1/2 quart warm water
2 ounces BlueLite C	2 ounces BlueLite C

3. For mildly dehydrated calves, feed the following mixture three times a day:

1-1/2 quarts of water	1 quart of whole milk
1/3 pound milk replacer	1/2 quart warm water
2 ounces BlueLite C	2 ounces BlueLite C

4. For calves weighing less than 80 pounds or more than 100 pounds, adjust dosage proportionally according to body weight.

5. When administering fluids via an esophageal tube or by drenching, mix the fluids and the BlueLite C to provide one ounce of BlueLite C powder for each 10 pounds body weight on a daily basis.

GUARANTEED ANALYSIS:

Potassium (K)	min	2.50%
		708.7 mg/oz
Sodium (Na)	min	4.00%
		113.40 mg/oz
Phosphorus (P)	min	0.18%
		51.0 mg/oz
Manesium (Mg)	min	0.055%
		15.6 mg/oz

AVAILABLE SIZES:

- 2 oz. Foil Bags
- 6 lb. Pail
- 25 lb. Pail
- 50 lb. Box

ALSO AVAILABLE:

- BlueLite® C Capsules
- 30 Capsules/Jar