

## The Benefits of Double S Emerald Liquid Supplements in a Ruminant Feeding Program

- Boosts dry matter intake by improving ration palatability. Liquid supplements can be used to increase the consumption of poorly fermented silage or hay.
- Can replace a portion of the protein supplement, lowering the cost of purchased feeds in the ration.
- Gives you flexibility — you can top-dress it onto forages, add to a TMR, insert into large bales with a probe, or provide it free-choice through a lick tank.
- Contains protein, minerals and vitamins to help meet the dietary requirements of a cow's daily diet.
- Can be fed successfully to beef cows, feedlot cattle, growing and replacement stock, dairy cows and heifers.

*Caution — follow label directions when feeding sheep or goats. In areas that have a high level of copper in the soil, copper toxicity may occur.*

## EMERALD 33% Liquid Feed Supplement (For Ruminants Only)

### Guaranteed Analysis

Crude Protein.....	Min. 33%
(This includes not more than 25% equivalent protein from Non Protein Nitrogen)	
Calcium (Ca).....	Min. 0.4% Max. 1.0%
Phosphorus (P).....	Min. 1.0%
Sulfur (S).....	Min. 0.4%
Potassium (K).....	Min. 1.8%
Magnesium (Mg).....	Min. 0.2%
Cobalt (Co) - ppm.....	Min. 1.0
Copper (Cu) - ppm.....	Min. 21.0
Iron (Fe) - ppm.....	Min. 53.0
Manganese (Mn) - ppm.....	Min. 53.0
Zinc(Zn)-ppm.....	Min. 160.0
Iodine (I) - ppm.....	Min. 2.0
Vitamin A.....	Min. 20,000 IU/LB
Vitamin D.....	Min. 5,000 IU/LB
Vitamin E.....	Min. 5 IU/LB
Total Sugars.....	24.0%
Dry Matter.....	Min. 62.0%
Moisture.....	Max. 38.0%

# EMERALD LIQUID FEED SUPPLEMENT

*The concept for today's  
successful livestock  
producer.*



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DOUBLE S  
LIQUID FEED SERVICES, INC.

# SAFETY

Liquid supplements today are very different from the products of 10 or 20 years ago. Great care in manufacturing has taken place so that cases of urea toxicity are almost unheard of. During the manufacturing process, molasses, phosphoric acid and urea are mixed together while hot, causing a chemical reaction. This reaction slows down the release of urea in the rumen. This “slow-release” process makes Emerald Liquid Supplements safe for your livestock.

# VERSATILITY

Emerald Liquid Supplements can be used in a variety of ways and for a wide range of operations. The most common method is offering the products free-choice through lick tanks. Other ways include top-dressing onto grain or forages, adding to a TMR, or including in a grind and mix ration.

One unique application for Emerald Liquid Supplements is to use the products for poor quality, low protein forages such as grass, straw, cornstalks or stubble, which have been baled. By either injecting the bales or pouring the liquid directly on at rates up to 10% of the weight of the bale you can improve palatability and digestibility of lower quality forages. This is valuable during times of drought or whenever there is a shortage of better quality forages. For more information on Double S Liquid Feed Service’s forage management program, contact your Double S representative.

# FEEDING

## Free-Choice with Emerald Liquid Supplements

Many of the Double S Liquid Feed Service’s liquid protein supplements have been specifically formulated for free-choice feeding. Feeding Emerald Liquid Supplements in a lick tank can save labor, allows the cattle to eat what they require and can help reduce feed cost when compared to more expensive dry feeds, range cubes, or blocks. Lick tanks provide excellent nutrition and versatility. With 24-hour availability more cattle can receive their dietary requirements. Boss cows cannot always dominate the source of liquid feed. Weaker or smaller animals have more opportunities to get the nutrition they need.

The following outlines the management of lick tank feeding.

- A. Do you have the proper type and size of lick tank?
- B. Are your lick tanks in good working order?
  1. Does the cover fit securely and properly?
  2. Do the wheels turn freely?
- C. Are your lick tanks clean? Debris, water and other contaminants should be removed before tanks are filled.
- D. How many lick tanks will you need?

The recommended rate is one lick wheel per 25 head. A four-wheel lick tank should be sufficient for 100 head or a two-wheel for 50 head.
- E. Where will the lick tank be located? If a lick tank is located too close to water, cattle may over consume.

There should be at least 50 feet or more between the lick tank and the water supply. On the other hand, lick tanks should not be located too far from the water supply. Placing a lick tank under a lone shade tree may also cause over consumption.

Always read and follow the label.

- A. Provide unlimited roughage, pasture, corn stalks, hay, etc.
- B. Feed a balanced mineral; usually one part calcium to one part phosphorus. Offer free-choice one week before providing Double S Liquid Feed Products in lick tanks. Continue to provide free-choice mineral while feeding lick tank products.
- C. Ensure cattle have access to unlimited clean water at all times.
- D. Ensure cattle have unlimited access to salt at all times.
- E. Ensure that Emerald Liquid Supplements are continually available to cattle.
- F. Do not offer lick tank products to newly arrived or stressed cattle until they are calm and have consumed a ration of roughage and water.
- G. Voluntary consumption rates may be unusually high or low during the first 1-2 weeks.
- H. If consumption of lick tank products seems excessively high or low, review the checklist or contact your Double S representative.
- I. The reason for significant changes in consumption can usually be identified and controlled by adjusting management practices or roughage conditions.