



Merrick's TECH BULLETIN

Milk Replacer Medications

Oxytetracycline, 20g/ton - Oxytetracycline is an antibiotic that is approved for inclusion in milk replacer at the rate of 20g/ton is to help increase the rate of weight gain and improve feed efficiency in calves.

Neomycin sulfate and Oxytetracycline (Neo-Oxy) - This is a 1:1 antibiotic combination that provides broad spectrum antibacterial activity. *Note: Use of more than one product containing neomycin or failure to follow withdrawal times may result in illegal drug residue.*

Sub-Therapeutic Level (0.10mg/lb of bodyweight daily)

20g Neomycin sulfate & 20g Oxytetracycline (per ton of finished milk replacer) can be fed to calves up to 250 lb for increased rate of weight gain and improved feed efficiency. This inclusion level provides 0.01g Neomycin sulfate and 0.01g Oxytetracycline per pound of finished milk replacer. There is a zero day withdrawal.

Treatment Level (10 mg/lb of bodyweight daily)

2000g Neomycin sulfate & 2000g Oxytetracycline (per ton of finished milk replacer) can be fed to calves up to 250 lb for treatment of bacterial enteritis caused by *E. coli* susceptible to Oxytetracycline; treatment and control of colibacillosis (bacterial enteritis) caused by *E. coli* susceptible to Neomycin; treatment and control of bacterial pneumonia (shipping fever complex) caused by *P. multocida* susceptible to Oxytetracycline. This inclusion level provides 1.0g Neomycin sulfate and 1.0g Oxytetracycline per pound of finished milk replacer.

Feed continuously for 7 to 14 days. If symptoms persist after using for 2 to 3 days, consult a veterinarian. Continue treatment for 24 to 48 hours beyond remission of disease symptoms.

A withdrawal period has not been established for use in preruminating calves. Do not use in calves to be processed for veal. A milk discard time has not been established for use in lactating dairy cattle. Do not use in female dairy cattle 20 months of age or older. Withdraw 5 days before slaughter.

Note: The 2000g inclusion levels for Neomycin sulfate and Oxytetracycline (Neo/Oxy) shown above assumes a milk replacer feeding rate of 1.0 lb/day (8 oz per feeding twice/day). To provide 10 mg/lb of body weight daily, milk replacers fed at other feeding rates will have different inclusion levels.

Milk Replacer Inclusion Levels of Neomycin Sulfate & Oxytetracycline

Milk Replacer Feeding Rate (daily)	Grams Neo/Oxy per Ton of Milk Replacer	Grams Neo/Oxy per Pound of Milk Replacer	Daily Amount of Neo/Oxy Consumed By Calf	Daily Amount of Neo/Oxy Consumed By Calf per lb of Body Wt.
1.0 lb	2000 g	1.0 g	1.0 g	10 mg
1.25 lb	1600 g	0.8 g	1.0 g	10 mg
1.5 lb	1333 g	0.667 g	1.0 g	10 mg

¹ inclusion levels are standardized for a 100 lb calf

Deccox, 45.4g/ton (to provide 22.7g per 100 lbs body weight daily) - for the prevention of coccidiosis in ruminating and pre-ruminating calves, including veal calves, and cattle caused by *Eimeria bovis* and *Eimeria zuernii*. Deccox is a coccidiostat that stops coccidial growth. Deccox is known to inhibit the activity of the cell's mitochondria. Total oocyst reduction with Deccox is 98%.

Bovatec, 90g/ton (to provide 1 mg per 2.2 lbs of body weight daily) - for control of coccidiosis caused by *Eimeria bovis* and *Eimeria zeurnii*. Bovatec is a coccidiocide, which means it kills coccidia. As an ionophore, Bovatec transports cations such as K⁺, Na⁺, Ca⁺, and Mg⁺ into the coccidial cell. These cations draw water into the cell, causing the coccidia to burst and die. Bovatec should not be fed to horses or dogs. Total oocyst reduction with Bovatec is 96%.

Note: When adding Deccox or Bovatec to milk replacer, the same medication should also be added to the calf starter to provide ongoing protection against coccidia as the calf grows. When added to calf starter, both Deccox and Bovatec are available in combination with Aureomycin, thereby providing an antibiotic source for calves. See your feed supplier and/or veterinarian for more details.