Aureo S700 Granular VFD Calculations

Aureo S 700®
Granular

Caution: Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian.

Chlortetracycline, Sulfamethazine
35 G Type A Medicated Article
Net wt 50 LB (22.68 kg)

This 2-page resource addresses a common challenge with writing VFD orders associated with Aureo S700 Granular.

The Drug Level for this **Type A Medicated Article** is 35 g/lb for each drug (Chlortetracycline & Sulfamethazine).

Aureo S700 (lb/ton of Supplement)	Supplement Will Contain (g/ton)		Feed Supplement at (lb/head/day)
	Chlortetracycline	Sulfamethazine	
40	1400	1400	0.5
20	700	700	1
10	350	350	2
5	175	175	4
4	140	140	5
2	70	70	10
1	35	35	20

Table 1. Aureo S700 Granular drug label (modified for visual clarity)

The VFD mixing directions must clarify the amount of **Type A Medicated Article (35 g/lb)** or **Type B Medicated Feed (3.5 g/lb)** to produce the **final Type C Medicated Feed drug level to be fed on farm**.

*Remember, a **Type A** medicated article is **never** fed directly to an animal, and a **Category II Type A** medicated article can only be used/mixed by an approved, FDA-licensed, medicated feed mill. Most producers will receive a Type B medicated feed from their VFD distributor. Confirm with your client and local feed distributor, as this will affect your Special Instructions.*

Please see reverse side for further explanation.

If a VFD for a Category II Type A medicated article is written for a client who does *not* have an FDA-approved medicated feed mill license, the feed distributor will be unable to distribute the Category II Type A medicated article and may distribute the Type B medicated feed to the livestock producer instead. In the case of AUREO S700 Type A medicated article, the concentration is 35 grams/pound. The Type B medicated feed that may be distributed has a concentration of 3.5 grams/pound. The mixing instructions must be specific to the starting drug concentration in the Type A or Type B products.

If the VFD provides mixing instructions for the **Category II Type A** concentration of **35 grams/pound,** but the client receives a product that contains **3.5 grams/pound**, the animals will receive the wrong dose of medication.

The calculations below demonstrate how the Type of feed and mixing instructions impact the dosage.

Category II Type A product that **cannot** be distributed to the client:

✗ **35 g** / lb

If the drug concentration is **35 grams/pound (Type A)**, the **Category II Type A** mixing instructions will result in the intended dosage. However, the client cannot receive this Category II Type A concentration.

$$\text{x } \frac{10 \text{ lbs}}{\text{ton}} = \frac{350 \text{ g}}{\text{ton}} \text{ x } \frac{1 \text{ ton}}{2000 \text{ lbs}} \text{ x } \frac{2 \text{ lb}}{\text{head}} = 0.35 \text{ g} =$$

Dosage animal receives if client receives the **Category II Type A** product with **Category II Type A** mixing instructions:

350 mg

Type B product that the client is legally able to receive:

3.5 g / **lb**

However, if the concentration of the product is **3.5 grams/pound (Type B)** and the **Category II Type A** instructions are used, it will result in an incorrect dosage.

$$\text{x } \frac{10 \text{ lbs}}{\text{ton}} = \frac{35 \text{ g}}{\text{ton}} \text{ x } \frac{1 \text{ ton}}{2000 \text{ lbs}} \text{ x } \frac{2 \text{ lb}}{\text{head}} = 0.035 \text{ g} =$$

Dosage animal receives if client receives the **Type B** product with **Category II Type A** mixing instructions:

35 mg ✗

Type B product that the client is legally able to receive:

3.5 g / lb

If the drug concentration is **3.5 grams/pound (Type B)**, the **Type B** mixing instructions will result in the intended dosage.

$$\text{x } \frac{100 \text{ lbs}}{\text{ton}} = \frac{350 \text{ g}}{\text{ton}} \text{ x } \frac{1 \text{ ton}}{2000 \text{ lbs}} \text{ x } \frac{2 \text{ lb}}{\text{head}} = 0.35 \text{ g} =$$

Dosage animal receives if client receives the **Type B** product with **Type B** mixing instructions:

350 mg ✓

To prevent this from causing rejection by the feed distributor, avoid issuing VFDs to producers for Category II Type A concentrations.

A list of Category I and II drugs can be found in CFR 558.4:
https://www.ecfr.gov/current/title-21/chapter-I/subchapter-E/part-558/subpart-A/section-558.4