

days out of every week until marketing. Do not treat within 10 days of slaughter.

(ii) *Amount*. 0.1 percent.

(a) *Indications for use*. As an aid in controlling outbreaks of coccidiosis caused by *Eimeria stiedae*.

(b) *Limitations*. Feed for 2 weeks. Do not treat within 10 days of slaughter.

[48 FR 3965, Jan. 28, 1983, as amended at 51 FR 7400, Mar. 3, 1986; 52 FR 2686, Jan. 26, 1987; 55 FR 29843, July 23, 1990; 59 FR 33197, June 28, 1994]

#### § 558.600 Tiamulin.

(a) *Approvals*. Type A article containing 5, 10, or 113.4 grams of tiamulin (as tiamulin hydrogen fumarate) per pound to 000010 in § 510.600(c) of this chapter.

(b) *Related tolerances*. See § 556.738 of this chapter.

(c) *Conditions of use in swine*—(1) *Amount*. 35 grams of tiamulin per ton.

(i) *Indications for use*. For control of swine dysentery associated with *Serpulina (Treponema) hyodysenteriae* susceptible to tiamulin.

(ii) *Limitations*. Feed continuously as sole ration on premises with a history of swine dysentery but where signs of disease have not yet occurred or following approved treatment of disease. Withdraw 2 days before slaughter. Not for use in swine over 250 pounds body weight. Use as only source of tiamulin. Swine being treated with tiamulin should not have access to feeds containing polyether ionophores (e.g., lasalocid, monensin, narasin, or salinomycin) as adverse reactions may occur.

(2) *Amount*. 10 grams of tiamulin per ton.

(i) *Indications for use*. For increased rate of weight gain and improved feed efficiency.

(ii) *Limitations*. Feed continuously as the sole ration. Not for use in swine weighing over 250 pounds. Use as sole source of tiamulin. Swine being treated with tiamulin should not have access to feeds containing polyether ionophores (e.g., lasalocid, monensin, narasin, or salinomycin) as adverse reactions may occur.

(3) *Amount*. 200 grams of tiamulin per ton.

(i) *Indications for use*. Treatment of swine dysentery associated with

*Serpulina (Treponema) hyodysenteriae* susceptible to tiamulin.

(ii) *Limitations*. Feed continuously as the sole feed for 14 consecutive days. Withdraw feed 7 days before slaughter. Not for use in swine over 113.40 kilograms (250 pounds) body weight. Use as the only source of tiamulin. Swine being treated with tiamulin should not have access to feeds containing polyether ionophores (e.g., monensin, lasalocid, narasin, semduramicin, or salinomycin) as adverse reactions may occur.

(4) *Amount per ton*. 35 grams of tiamulin (as tiamulin hydrogen fumarate), plus the equivalent of approximately 400 grams of chlortetracycline hydrochloride varying with body weight and feed consumption to provide 10 milligrams of chlortetracycline per pound of body weight daily.

(i) *Indications for use*. Treatment of swine bacterial enteritis caused by *Escherichia coli* and *Salmonella choleraesuis* and bacterial pneumonia caused by *Pasteurella multocida* susceptible to chlortetracycline, and control of swine dysentery associated with *Serpulina (Treponema) hyodysenteriae* susceptible to tiamulin.

(ii) *Limitations*. Feed continuously as sole ration for 14 days. Not for use in swine weighing over 250 pounds. Use as only source of chlortetracycline and tiamulin. Swine being treated with tiamulin should not have access to feeds containing polyether ionophores (e.g., monensin, salinomycin, narasin, semduramicin, and lasalocid) as adverse reactions may occur. If signs of toxicity occur, discontinue use. Withdraw 2 days before slaughter. As chlortetracycline calcium complex, Type A medicated articles containing the equivalent of 50 to 100 grams per pound of chlortetracycline hydrochloride provided by 000004 and 046573 in § 510.600(c) of this chapter.

[52 FR 26956, July 17, 1987, as amended at 53 FR 39257, Oct. 6, 1988; 59 FR 41975, Aug. 16, 1994; 62 FR 12086, Mar. 14, 1997; 62 FR 35077, June 30, 1997]

#### § 558.615 Thiabendazole.

(a) *Approvals*. Dry Type A medicated articles: 22, 44.1, 66.1, and 88.2 percent to 050604 in § 510.600(c) of this chapter. The 66.1 percent Type A is solely for

the manufacture of cane molasses liquid Type B feed which is mixed in dry feeds. The 88.2 percent Type A is used solely for the manufacture of an aqueous slurry for adding to a Type C dry cattle feed.

(b) *Special considerations.* Do not use in Type B or Type C medicated feed containing bentonite.

(c) *Related tolerances.* See § 556.730 of this chapter.

(d) *Conditions of use.* It is used in feed for animals as follows:

(1) *Cattle*—(i) *Amount.* 3 grams per 100 lb. body weight.

(a) *Indications for use.* Control of infections of gastrointestinal roundworms (*Trichostrongylus spp.*, *Haemonchus spp.*, *Ostertagia spp.*, *Nematodirus spp.*, *Oesophagostomum radiatum*).

(b) *Limitations.* Use 3 grams per 100 lb. body weight at a single dose; may repeat once in 2 to 3 weeks; do not treat animals within 3 days of slaughter; milk taken from treated animals within 96 hours (8 milkings) after the latest treatment must not be used for food.

(ii) *Amount.* 5 grams per 100 lb. body weight.

(a) *Indications for use.* Control of severe infections of gastrointestinal roundworms (*Trichostrongylus spp.*, *Haemonchus spp.*, *Ostertagia spp.*, *Nematodirus spp.*, *Oesophagostomum radiatum*); control of infections of *Cooperia spp.*

(b) *Limitations.* 5 grams per 100 lb. body weight at a single dose or divided into 3 equal doses, administered 1 dose each day, on succeeding days; may repeat once in 2 to 3 weeks; do not treat animals within 3 days of slaughter; milk taken from treated animals within 96 hours (8 milkings) after the latest treatment must not be used for food.

(2) *Goats*—(i) *Amount.* 3 grams per 100 lb. body weight.

(ii) *Indications for use.* Control of severe infections of gastrointestinal roundworms (*Trichostrongylus spp.*, *Haemonchus spp.*, *Ostertagia spp.*, *Cooperia spp.*, *Nematodirus spp.*, *Bunostomum spp.*, *Strongyloides spp.*, *Chabertia spp.*, and *Oesophagostomum spp.*).

(iii) *Limitations.* 3 grams per 100 lb. body weight at a single dose; do not treat animals within 30 days of slaugh-

ter; milk taken from treated animals within 96 hours (8 milkings) after the latest treatment must not be used for food.

(3) *Sheep and goats*—(i) *Amount.* 2 grams per 100 lb. body weight.

(ii) *Indications for use.* Control of infections of gastrointestinal roundworms (*Trichostrongylus spp.*, *Haemonchus spp.*, *Ostertagia spp.*, *Cooperia spp.*; *Nematodirus spp.*, *Bunostomum spp.*, *Strongyloides spp.*, *Chabertia spp.*, and *Oesophagostomum spp.*); also active against ova and larvae passed by sheep from 3 hours to 3 days after the feed is consumed (good activity against ova and larvae of *T. colubriformis* and *axeii*, *Ostertagia spp.*, *Nematodirus spp.*, *Strongyloides spp.*; less effective against those of *Haemonchus contortus* and *Oesophagostomum spp.*).

(iii) *Limitations.* Use 2 grams per 100 lb. body weight at a single dose; do not treat animals within 30 days of slaughter; milk taken from treated animals within 96 hours (8 milkings) after the latest treatment must not be used for food.

(4) *For swine*—(i) *Amount.* 45.4–908 grams per ton (0.005–0.1 percent).

(ii) *Indications for use.* Aid in the prevention of infections of large roundworms (genus *Ascaris*).

(iii) *Limitations.* Administer continuously feed containing 0.05–0.1 percent thiabendazole per ton for 2 weeks followed by feed containing 0.005–0.02 percent thiabendazole per ton for 8–14 weeks; do not treat animals within 30 days of slaughter.

(5) *Pheasants*—(i) *Amount.* 454 grams per ton (0.05 percent) continuously for 2 weeks (14 days).

(ii) *Indications for use.* For the treatment of gapeworms (*Syngamus trachea*) in pheasants.

(iii) *Limitations.* Do not use treated pheasants for food for 21 days after last day of treatment. Fertility, hatchability, and other reproductive data are not available on use in breeding animals.

[40 FR 13959, Mar. 27, 1975, as amended at 47 FR 49641, Nov. 2, 1982; 49 FR 29958, July 25, 1984; 51 FR 7400, Mar. 3, 1986; 52 FR 2686, Jan. 26, 1987; 62 FR 63271, Nov. 28, 1997]