

§ 520.1802b Piperazine-carbon disulfide complex boluses.

(a) *Specifications.* Each bolus contains 20 grams of piperazine-carbon disulfide complex.

(b) *Sponsor.* See 000009 in § 510.600(c) of this chapter.

(c) *Conditions of use: Horses and ponies*—(1) *Amount.* For removal of ascarids and small strongyles, 1 bolus (20 grams) per 500 pounds body weight; removal of large strongyles, pinworms, and bots, 1 bolus per 250 pounds body weight.¹

(2) *Indications for use.* For removing ascarids (large roundworms, *Parascaris equorum*), large strongyles (*Strongylus* spp.) bots (*Gastrophilus* spp.), small strongyles, and pinworms (*Oxyuris equi*).¹

(3) *Limitations.* Withhold feed overnight or for 8 to 10 hours. Give water just before and/or after treatment. Resume regular feeding 4 to 6 hours after treatment. Treatment of debilitated or anemic animals is contraindicated. Do not administer to animals that are or were recently affected with colic, diarrhea, or infected with a serious infectious disease. As with most anthelmintics, drastic cathartics or other gastrointestinal irritants should not be administered in conjunction with this drug. Animals in poor condition or heavily parasitized should be given one half the recommended dose and treated again in 2 or 3 weeks. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.¹

[45 FR 52782, Aug. 8, 1980]

§ 520.1802c Piperazine-carbon disulfide complex with phenothiazine suspension.

(a) *Specifications.* Each fluid ounce contains 5 grams of piperazine-carbon disulfide complex and 0.83 gram of phenothiazine.

(b) *Sponsor.* See 000009 in § 510.600(c) of this chapter.

(c) *Conditions of use: Horses and ponies*—(1) *Amount.* One fluid ounce per 100 pounds of body weight.

(2) *Indications for use.* For removing ascarids (large roundworms, *Parascaris equorum*), bots (*Gastrophilus* spp.), small strongyles, and large strongyles (*Strongylus* spp.).

(3) *Limitations.* See § 520.1802a(c)(3).

[45 FR 52782, Aug. 8, 1980]

§ 520.1803 Piperazine citrate capsules.

(a) *Specifications.* Piperazine citrate capsules contain piperazine citrate equivalent to 140 milligrams of piperazine base in each capsule.

(b) *Sponsor.* See No. 021091 in § 510.600(c) of this chapter.

(c) *Conditions of use.* (1) It is used in dogs and cats for the removal of large roundworms (*Toxocara canis* and *Toxascaris leonina*).

(2) The contents of 1 capsule should be mixed with the food of the animal for each 5 pounds, or fraction thereof of body weight, except dogs weighing over 25 pounds should be given the contents of 6 capsules. The drug should be mixed in ½ of the regular feeding and when the animal has finished eating the dosed food, the remainder of the food may be given. Dogs and cats may be wormed at 6 to 8 weeks of age. The first treatment should be repeated 10 days later. Reinfection may occur. Repeat treatment if indicated.

(3) Severely debilitated animals should not be wormed except on the advice of a veterinarian.

[40 FR 13838, Mar. 27, 1975, as amended at 54 FR 38515, Sept. 19, 1989]

§ 520.1804 Piperazine phosphate capsules.

(a) *Specifications.* Each capsule contains 120, 300, or 600 milligrams of piperazine phosphate monohydrate.

(b) *Sponsor.* See No. 050906 in § 510.600(c) of this chapter.

(c) *Conditions of use*—(1) *Amount.* 60 milligrams of piperazine phosphate monohydrate per pound of body weight.¹

(2) *Indications for use*—(i) *Dogs.* It is used for the removal of large roundworms (ascarids) *Toxocara canis* and *Toxascaris leonina*.¹

(ii) *Cats.* It is used for the removal of large roundworms (ascarids) *Toxocara mystax* and *Toxascaris leonina*.¹

¹These conditions are NAS/NRC reviewed and deemed effective. Applications for these uses need not include effectiveness data as specified by § 514.111 of this chapter, but may require bioequivalency and safety information.

§ 520.1805

(3) *Limitations.* Administer in animal's food or milk. For animals up to 1 year of age administer every 2 or 3 months; for animals over 1 year old, administer periodically as necessary. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.¹

[43 FR 6941, Feb. 17, 1978; 43 FR 9804, Mar. 10, 1978, as amended at 46 FR 20158, Apr. 3, 1981]

§ 520.1805 Piperazine phosphate with thenium closylate tablets.

(a) *Specifications.* Each scored tablet contains the equivalent of 250 milligrams piperazine hexahydrate (as piperazine phosphate) and 125 milligrams thenium (as thenium closylate) or 500 milligrams piperazine hexahydrate (as piperazine phosphate) and 250 milligrams thenium (as thenium closylate).

(b) *Sponsor.* See No. 000061 in § 510.600(c) of this chapter.

(c) *Conditions of use—(1) Amount.* Administer orally to dogs as follows:

NUMBER OF TABLETS AT EACH OF THE TWO DOSES		
Animal weight (lb)	375 mg	750 mg
2 but less than 5	1/2
5 but less than 10	1	1/2
10 or heavier	2	1

(2) *Indications for use.* For removal of immature (fourth stage larvae) and adult hookworms (*Ancylostoma caninum*, *A. braziliense*, and *Uncinaria stenocephala*) and ascarids (*Toxocara canis*) from weaned pups and adult dogs.

(3) *Limitations.* Do not use this product to treat dogs weighing less than 2 pounds, unweaned pups, or pups under 5 weeks of age. Maximum efficacy against hookworms necessitates two doses in 1 day of treatment. The interval between the doses should be not less than 4 hours or more than 24 hours. Administer the first dose in the morning before feeding. Do not permit dog to chew tablet. Feed the dog between doses. Do not feed milk or other fatty foods during treatment. Retreatment may be needed in 7 to 28 days as determined by laboratory fecal examinations or in animals kept in known contaminated quarters. Federal law re-

21 CFR Ch. I (4-1-02 Edition)

stricts this drug to use by or on the order of a licensed veterinarian.

[43 FR 32747, July 28, 1978, as amended at 47 FR 55476, Dec. 10, 1982; 61 FR 8873, Mar. 6, 1996; 62 FR 61625, Nov. 19, 1997]

§ 520.1806 Piperazine monohydrochloride liquid.

(a) *Specifications.* The product contains 4.77 percent piperazine monohydrochloride, equivalent to 3.35 percent piperazine base.

(b) *Sponsor.* See Nos. 017135 and 063765 in § 510.600(c) of this chapter.

(c) *Conditions of use—(1) Indications for use.* For dogs for the removal of roundworms (*Toxocara canis* and *Toxascaris leonina*).

(2) *Dosage.* Administer 20 to 30 milligrams of piperazine base per pound of body weight as a single dose.

(3) *Limitations.* Administer by mixing into the animal's ration to be consumed at one feeding. For animals in heavily contaminated areas, reworm at monthly intervals. Not for use in unweaned pups or animals less than three weeks of age. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

[47 FR 20758, May 14, 1982, as amended at 57 FR 48163, Oct. 22, 1992; 58 FR 44611, Aug. 24, 1993; 59 FR 28769, June 3, 1994; 63 FR 8348, Feb. 19, 1998]

§ 520.1807 Piperazine.

(a) *Specifications.* A soluble powder or liquid containing piperazine dihydrochloride or dipiperazine sulfate, equivalent to 17, 34, or 230 grams of piperazine per pound or 100 milliliters.

(b) *Sponsor.* See 015565 in § 510.600(c) of this chapter.

(c) *Related tolerances.* See § 556.513 of this chapter.

(d) *Conditions of use—(1) Chickens—(i) Amount.* 50 milligrams per bird under 6 weeks, 100 milligrams per bird over 6 weeks.

(ii) *Indications for use.* For removal of large roundworm (*Ascaridia* spp.).

(iii) *Limitations.* For use in drinking water or feed. Use as sole source of drinking water. Prepare fresh solution daily. Use as 1-day single treatment. Withdraw 14 days prior to slaughter. Do not use for chickens producing eggs for human consumption. Consult your