Food and Drug Administration, HHS

PART 524—OPHTHALMIC AND TOPICAL DOSAGE FORM NEW ANIMAL DRUGS

Sec.
524.86 Amitraz liquid.
524.154 Bacitracin or bacitracin zinc-neomycin sulfate-polymyxin B sulfate ophthalmic ointment.
524.155 Bacitracin zinc-polymyxin B sulfate-neomycin sulfate-hydrocortisone or hydrocortisone acetate ophthalmic ointment.
524.390 Chloramphenicol ophthalmic and topical dosage forms.
524.390a Chloramphenicol ophthalmic ointment.
524.390b Chloramphenicol ophthalmic solution.
524.390d Chloramphenicol-prednisolone ophthalmic ointment.
524.402 Chlorhexidine ointment.
524.450 Clotrimazole cream.
524.463 Copper naphthenate solution.
524.520 Cuprimyxin cream.
524.575 Cyclosporine ophthalmic ointment.
524.660 Dimethyl sulfoxide ophthalmic and topical dosage forms.
524.660a Dimethyl sulfoxide solution.
524.660b Dimethyl sulfoxide gel.
524.770 Doramectin.
524.802 Enrofloxacin, silver sulfadiazine emulsion.
524.814 Eprinomectin.
524.900 Famphur.
524.920 Fentiazon.
524.960 Flumethasone, neomycin sulfate, and polymyxin B sulfate ophthalmic solutions.
524.981 Fluocinolone acetonide ophthalmic and topical dosage forms.
524.981a Fluocinolone acetonide cream.
524.981b Fluocinolone acetonide solution.
524.981c Fluocinolone acetonide, neomycin sulfate cream.
524.981d Fluocinolone acetonide, dimethyl sulfoxide solution.
524.981e Fluocinolone acetonide, dimethyl sulfoxide otic solution.
524.1005 Furanazidone aerosol powder.
524.1044 Gentamicin sulfate ophthalmic and topical dosage forms.
524.1044a Gentamicin sulfate ophthalmic solution.
524.1044b Gentamicin sulfate, betamethasone valerate otic solution.
524.1044c Gentamicin sulfate ophthalmic ointment.
524.1044d Gentamicin sulfate, betamethasone valerate ointment.
524.1044e Gentamicin sulfate spray.
524.1044f Gentamicin sulfate, betamethasone valerate topical spray.
524.1044g Gentamicin sulfate, betamethasone valerate, clotrimazole ointment.
524.1044h Gentamicin sulfate, mometasone furoate, clotrimazole otic suspension.
524.1140 Imdacloprid and ivermectin.
524.1193 Ivermectin pour-on.
524.1195 Ivermectin otic suspension.
524.1200 Kanamycin ophthalmic and topical dosage forms.
524.1200a Kanamycin ophthalmic ointment.
524.1200b Kanamycin ophthalmic aqueous solution.
524.1204 Kanamycin sulfate, calcium amphotericin, and hydrocortisone acetate.
524.1240 Levamisole.
524.1376 2-Mercaptobenzothiazole solution.
524.1443 Miconazole.
524.1446 Milbemycin oxime solution.
524.1451 Moxidectin.
524.1465 Mupirocin ointment.
524.1484 Neomycin sulfate ophthalmic and topical dosage forms.
524.1484a Neomycin sulfate ophthalmic ointment.
524.1484b Neomycin sulfate, isoflupredone acetate, tetracaine hydrochloride, and myristyl-gamma-picolinium chloride, topical powder.
524.1484c Neomycin sulfate, isoflupredone acetate, tetracaine hydrochloride ointment.
524.1484d Neomycin sulfate, hydrocortisone acetate, tetracaine hydrochloride ear ointment.
524.1484e Neomycin sulfate and polymyxin B sulfate ophthalmic solution.
524.1484f Neomycin sulfate, prednisolone acetate, tetracaine hydrochloride ear drops.
524.1484g Neomycin sulfate-thiabendazole-dexamethasone solution.
524.1484h Neomycin, penicillin, polymyxin, hydrocortisone suspension.
524.1484i Neomycin sulfate, hydrocortisone acetate, sterile ointment.
524.1484j [Reserved]
524.1484k Neomycin sulfate, prednisolone, tetracaine, and squalene topical-otic suspension.
524.1580 Nitrofurazone ophthalmic and topical dosage forms.
524.1580a [Reserved]
524.1580b Nitrofurazone ointment.
524.1580c Nitrofurazone soluble powder.
524.1580d [Reserved]
524.1580e Nitrofurazone ointment with butacaine sulfate.
524.1600 Nystatin ophthalmic and topical dosage forms.
524.1600a Nystatin, neomycin, thiostrepton, and triamcinolone acetonide ointment.
524.1600b Nystatin, neomycin, thiostrepton, and triamcinolone acetonide ointment.
524.1662 Oxytetracycline hydrochloride ophthalmic and topical dosage forms.
524.1662a Oxytetracycline hydrochloride and hydrocortisone spray.
§ 524.86 Amitraz liquid.

(a) Specifications. Amitraz liquid contains 19.9 percent amitraz in an organic solvent.

(b) Sponsor. See No. 000009 in § 510.600(c) of this chapter.

(c) Conditions of use—(1) Indications for use. For dogs for the treatment of generalized demodicosis (Demodex canis).

(2) Amount. One 10.6 milliliter bottle per 2 gallons of warm water (250 parts per million) for each treatment, for a total of 3 to 6 treatments, 14 days apart.

(3) Limitations. Continue treatment until no viable mites are found in skin scrapings at 2 successive treatments, or until 6 treatments have been applied. Do not use for treatment of localized demodicosis or scabies. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[47 FR 18589, Apr. 30, 1982]

§ 524.155 Bacitracin zinc-polymyxin B sulfate-neomycin sulfate-hydrocortisone or hydrocortisone acetate ophthalmic ointment.

(a) Sponsor. To firms identified in §510.600(c) of this chapter as follows:

1. To 000061; each gram of ointment contains 400 units of bacitracin zinc, 10,000 units of polymyxin B sulfate, 5 milligrams of neomycin sulfate (equivalent to 3.5 milligrams of neomycin base), and 10 milligrams of hydrocortisone acetate.

2. To 025463; each gram of ointment contains 400 units of bacitracin zinc, 10,000 units of polymyxin B sulfate, 5 milligrams of neomycin sulfate (equivalent to 3.5 milligrams of neomycin base), and 10 milligrams of hydrocortisone acetate.

(b) Conditions of use. Dogs and cats—(1) Amount. Apply a thin film over the cornea three or four times daily.

(2) Indications for use. For treating acute or chronic conjunctivitis caused by susceptible organisms.

(3) Limitations. All topical ophthalmic preparations containing corticosteroids with or without an antimicrobial agent are contraindicated in the initial treatment of corneal ulcers. They should not be used until the infection is under control and corneal regeneration is well underway. Federal law restricts
§ 524.390 Chloramphenicol ophthalmic and topical dosage forms.

§ 524.390a Chloramphenicol ophthalmic ointment.

(a) Specifications. Each gram contains 10 milligrams chloramphenicol in a petrolatum base.

(b) Sponsor. See Nos. 000856 and 025463 in §510.600(c) of this chapter for use as in paragraph (c)(1)(i) of this section. See No. 017030 for use as in paragraph (c)(1)(ii) of this section.

(c) Conditions of use. Dogs and cats—

(1) Amount. Apply as follows:
   (i) Every 3 hours around the clock for 48 hours after which night instillations may be omitted.
   (ii) Four to six times daily to affected eye for the first 72 hours depending upon the severity of the condition. A small amount of ointment should be placed in the lower conjunctival sac.

(2) Indications for use. Treatment of bacterial conjunctivitis caused by organisms susceptible to chloramphenicol. Therapy should be continued for 48 hours after the eye appears normal.

(3) Limitations. Therapy for cats should not exceed 7 days. As with other antibiotics, prolonged use may result in overgrowth of nonsusceptible organisms. If superinfection occurs, or if clinical improvement is not noted within a reasonable period, discontinue use, and institute appropriate therapy. Prolonged use in cats may produce blood dyscrasias. Chloramphenicol products must not be used in meat-, egg-, or milk-producing animals. The length of time that residues persist in milk or tissues has not been determined. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.390b Chloramphenicol ophthalmic solution.

(a) Specifications. Each milliliter contains 5 milligrams of chloramphenicol.

(b) Sponsor. See No. 017030 in §510.600(c) of this chapter.

(c) Conditions of use. Dogs and cats—

(1) Amount. Apply one or two drops, 4 to 6 times a day for the first 72 hours depending upon the severity of the condition. Intervals between applications may be increased after the first 2 days.

(2) Indications for use. Treatment of bacterial conjunctivitis caused by organisms susceptible to chloramphenicol. Therapy should be continued for 48 hours after the eye appears normal.

(3) Limitations. Therapy for cats should not exceed 7 days. As with other antibiotics, prolonged use may result in overgrowth of nonsusceptible organisms. If superinfection occurs, or if clinical improvement is not noted within a reasonable period, discontinue use, and institute appropriate therapy. Prolonged use in cats may produce blood dyscrasias. Chloramphenicol products must not be used in meat-, egg-, or milk-producing animals. The length of time that residues persist in milk or tissues has not been determined. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.390d Chloramphenicol-prednisolone ophthalmic ointment.

(a) Specifications. Each gram contains 10 milligrams of chloramphenicol and 2.5 milligrams of prednisolone acetate.

(b) Sponsor. See No. 017030 in §510.600(c) of this chapter.

(c) Conditions of use. Dogs and cats—

(1) Amount. Apply 4 to 6 times daily to the affected eye for the first 72 hours depending upon the severity of the condition. Continue treatment for 48 hours after the eye appears normal.

(2) Indications for use. Treatment of bacterial conjunctivitis and ocular inflammation caused by organisms susceptible to chloramphenicol.

(3) Limitations. Therapy for cats should not exceed 7 days. Prolonged use in cats may produce blood dyscrasia. As with other antibiotics, prolonged...
use may result in overgrowth of non-susceptible organisms. If superinfection occurs or if clinical improvement is not noted within a reasonable period, discontinue use and institute appropriate therapy. All topical ophthalmic preparations containing corticosteroids, with or without an antimicrobial agent, are contraindicated in the initial treatment of corneal ulcers. They should not be used until the infection is under control and corneal regeneration is well underway. Chloramphenicol products must not be used in meat-, egg-, or milk-producing animals. The length of time that residues persist in milk or tissues has not been determined. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.402 Chlorhexidine ointment.

(a) Specifications. The product contains 1-percent chlorhexidine acetate in an ointment base.

(b) Sponsor. See Nos. 000856 and 058829 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Indications for use. Use as a topical antiseptic ointment for surface wounds on dogs, cats, and horses.

(2) Limitations. Not for use in horses intended for food.

§ 524.450 Clotrimazole cream.

(a) Specifications. Each gram of cream contains 10 milligrams of clotrimazole.

(b) Sponsor. See 000859 in §510.600(c).

(c) Conditions of use—(1) Amount. Apply 1⁄4-inch ribbon of cream per square inch of lesion once daily for 2 to 4 weeks.

(2) Indications of use. For the treatment of fungal infections of dogs and cats caused by Microsporum canis and Trichophyton mentagrophytes.

(3) Limitations. Wash hands thoroughly after use to avoid spread of infection. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.463 Copper naphthenate solution.

(a) Specifications. The drug contains 37.5 percent copper naphthenate in a suitable solvent.

(b) Sponsors. See Nos. 000856, 017135, and 058829 in §510.600(c) of this chapter.

(c) Conditions of use—Horses and ponies—(1) Amount. Apply daily to affected hooves until fully healed.

(2) Indications for use. As an aid in treating horses and ponies for thrush caused by organisms susceptible to copper naphthenate.

(3) Limitations. Use on horses and ponies only. Remove debris and necrotic material before applying. Avoid contact around eyes. Do not use on animals that are raised for food production. Do not contaminate feed. Do not allow runoff of excess drug into hair because contact with the drug may cause some hair loss.

§ 524.520 Cuprimyxin cream.

(a) Specifications. The drug contains 0.5 percent cuprimyxin (6-methoxy-1-phenazinol 5, 10-dioxide, cupric complex) in an aqueous cream base.

(b) Sponsor. See No. 063238 in §510.600(c) of this chapter.

(c) Conditions of use. (1) Cuprimyxin is a broad spectrum antibacterial and antifungal cream for the topical treatment of superficial infections in horses, dogs, and cats caused by bacteria, dermatophytes (Trichophyton spp., Microsporum spp.) and yeast (Candida albicans) affecting skin, hair, and external mucosae.

(2) The cream is applied twice daily to affected areas by rubbing into lesions. Treatment should be continued for a few days after clinical recovery to avoid possible relapses.

(3) After application to cutaneous areas, a change in color from dark green to pink is due to the liberation of free myxin from its copper complex.

(4) If no response is seen within seven days, diagnosis and therapy should be reevaluated. If any adverse local reaction is observed after topical application, discontinue treatment.
§ 524.660b Dimethyl sulfoxide ophthalmic and topical dosage forms.

§ 524.660a Dimethyl sulfoxide solution.

(a) Specifications. Dimethyl sulfoxide contains 90 percent of dimethyl sulfoxide and 10 percent of water.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use.—(1) Indications for use. For the control of pain and inflammation associated with osteoarthritis in tar- sal, carpal, metacarpophalangeal, metatarso-phalangeal, and proximal interphalangeal joints.

(2) Limitations. Not for use in horses intended for food. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.660 Dimethyl sulfoxide gel.

(a) Specifications. Dimethyl sulfoxide gel, veterinary contains 90 percent of dimethyl sulfoxide in an aqeous gel.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use.—(1) Indications for use. For the control of pain and inflammation associated with osteoarthritis in tar- sal, carpal, metacarpophalangeal, metatarso-phalangeal, and proximal interphalangeal joints.

(2) Limitations. Not for use in horses intended for food. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.575 Cyclosporine ophthalmic ointment.

(a) Specifications. Each gram of ointment contains 2 milligrams of cyclosporine.

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

(c) Conditions of use—(1) Amount. Apply a 1/4-inch strip of ointment to the affected eye(s) every 12 hours.

(2) Indications for use. For management of chronic keratoconjunctivitis sicca (KCS) and chronic superficial keratitis (CSK) in dogs.

(3) Limitations. Place ointment directly on cornea or into the conjunctival sac. Safety of use in puppies, pregnant or breeding animals has not been determined. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.590 Diclofenac.

(a) Specifications. Each gram of cream contains 10 milligrams diclofenac sodium.

(b) Sponsor. See No. 065274 in § 510.600(c) of this chapter.

(c) Conditions of use in horses—(1) Amount. Apply a 5-inch (5") ribbon of cream twice daily over the affected joint for up to 10 days and rub thoroughly into the hair covering the joint until it disappears.

(2) Indications for use in horses. For the control of pain and inflammation associated with osteoarthritis in tarsal, carpal, metacarpophalangeal, metatarso-phalangeal, and proximal interphalangeal joints.

(3) Limitations. Not for use in horses intended for food. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.660b Dimethyl sulfoxide ophthalmic and topical dosage forms.

§ 524.660a Dimethyl sulfoxide solution.

(a) Specifications. Dimethyl sulfoxide contains 90 percent of dimethyl sulfoxide and 10 percent of water.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use.—(1) Indications for use. For use on horses and dogs as a topical application to reduce acute swelling due to trauma:

(i) In horses administered 2 or 3 times daily in an amount not to exceed 100 milliliters per day. Total duration of therapy should not exceed 30 days.

(ii) In dogs administered 3 or 4 times daily in an amount not to exceed 20 milliliters per day. Total duration of therapy should not exceed 14 days.

(2) Not for use in horses and dogs intended for breeding purposes nor in horses slaughtered for food. Other topical medications should only be used when the dimethyl sulfoxide treated area is thoroughly dry. Do not administer by any other route.

(3) For use by or on the order of a licensed veterinarian.

§ 524.660b Dimethyl sulfoxide gel.

(a) Specifications. Dimethyl sulfoxide gel, veterinary contains 90 percent of dimethyl sulfoxide in an aqueous gel.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use.—(1) Indications for use. For use on horses and dogs as a topical application to reduce acute swelling due to trauma.

(2) Amount—(i) Horses. Administer 2 or 3 times daily in an amount not to exceed 100 grams per day. Total duration of therapy should not exceed 30 days.

(ii) Dogs. Administer 3 or 4 times daily in an amount not to exceed 20 grams per day. Total duration of therapy should not exceed 14 days.

(3) Limitations. Do not use in horses and dogs intended for breeding purposes or in horses slaughtered for food. Restricted to topical use on horses and dogs only. Due to rapid penetrating ability of dimethyl sulfoxide, rubber gloves should be worn when applying
§ 524.770 Doramectin.

(a) Specifications. Each milliliter (mL) of solution contains 5 milligrams (mg) doramectin.

(b) Sponsor. See No. 000069 in §510.600(c) of this chapter.

(c) Related tolerances. See §556.225 of this chapter.

(d) Special considerations. See §500.25 of this chapter.

(e) Conditions of use—(1) Amount. Administer topically as a single dose 0.5 mg (1 mL) per kilogram (1 mL per 22 pounds) body weight.

(2) Indications for use. For treatment and control of gastrointestinal roundworms: Ostertagia ostertagi (adults and fourth-stage larvae), Ostertagia ostertagi (inhibited fourth-stage larvae), Ostertagia lyrata (adults), Haemonchus placei (adults and fourth-stage larvae), Trichostrongylus axei (adults and fourth-stage larvae), Trichostrongylus colubriformis (adults and fourth-stage larvae), Cooperia oncophora (adults and fourth-stage larvae), Cooperia punctata (adults and fourth-stage larvae), Cooperia pectinata (adults and fourth-stage larvae), Oesophagostomum radiatum (adults and fourth-stage larvae), Trichuris spp. (adults); lungworms: Dictyocaulus viviparus (adults and fourth-stage larvae); eyeworms: Thelazia globosa (adults), Thelazia skrjabini (adults); grubs: Hypoderma bovis and Hypoderma lineatum; sucking lice: Linognathus vituli, Haematopinus eurysternus, and Solenopotes capillatus; biting lice: Bovicola (Damalinia) bovis; mange mites: Choriotes bovis and Sarcoptes scabiei; horn flies: Haematobia irritans; and to control infections and to protect from reinfection with Cooperia oncophora, Dictyocaulus viviparus, Ostertagia ostertagi, and Oesophagostomum radiatum for 28 days; and, with Cooperia punctata and Haemonchus placei for 35 days after treatment; and to control infestations and to protect from reinfection with Linognathus vituli for 42 days and with Bovicola (Damalinia) bovis for 77 days after treatment.

(3) Limitations. Do not slaughter cattle within 45 days of latest treatment. Not for use in female dairy cattle 20 months of age or older. Do not use in calves to be processed for veal.


§ 524.802 Enrofloxacin, silver sulfadiazine emulsion.

(a) Specifications. Each milliliter contains 5 milligrams (mg) enrofloxacin and 10 mg silver sulfadiazine.

(b) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(c) Conditions of use—Dogs—(1) Amount. 5 to 10 drops for dogs weighing 35 pounds (lb) or less and 10 to 15 drops for dogs weighing more than 35 lb; applied twice daily for up to 14 days.

(2) Indications for use. For the treatment of otitis externa in dogs.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits the extra-label use of this drug in food-producing animals.

[65 FR 66629, Nov. 7, 2000]

§ 524.814 Eprinomectin.

(a) Specifications. Each milliliter contains 5 milligrams of eprinomectin.

(b) Sponsor. See No. 000006 in §510.600(c) of this chapter.

(c) Related tolerances. See §556.227 of this chapter.

(d) Conditions of use—(1) Amount. One milliliter (5 milligrams) per 10 kilograms of body weight (500 micrograms per kilogram).

(2) Indications for use. The drug is used in beef and dairy cattle for treatment and control of gastrointestinal roundworms (Haemonchus placei (adult and L4), Ostertagia ostertagi (adult and L4), including inhibited L4), Trichostrongylus axei (adult and L4), T. colubriformis (adult and L4), T. longisocularis (adult), Cooperia oncophora (adult and L4), C. punctata (adult and L4), C. surnabada (adult and L4), Nematodirus helvetianus (adult and L4), Bunostomum phlebotomum (adult...
and L4). *Oesophagostomum radiatum* (adult and L4), *Strongyloides papillosus* (adults), *Trichuris spp.* (adults); lungworms (*Dictyocaulus viviparus*, adult and L4); cattle grubs (all parasitic stages *Hypoderma lineatum*, *H. bovis*); lice (*Damalinia bovis, Linognathus vituli*, *Haematopinus eurysternus*, *Solenopotes capillatus*); mange mites (*Chorioptes bovis, Sarcoptes scabiei*); and horn flies (*Haematobia irritans*). Controls and protects from reinfection of *D. viviparus* for 21 days after treatment and *H. irritans* for 7 days after treatment.

(3) Limitations. Apply topically along backbone from withers to tailhead. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.


§ 524.900 Famphur.

(a) Chemical name. O,O-Dimethyl O-[(p-(dimethylsulfamoyl)phenyl)phosphorothioate.

(b) Specifications. The drug is in liquid form containing 13.2 percent famphur.

(c) Sponsor. See Nos. 000061 and 051311 in §510.600(c) of this chapter.

(d) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.

(e) Related tolerances. See §556.273 of this chapter.

§ 524.920 Fenthion.

(a) Chemical name. O,O-Dimethyl O-[4-(methylthio)-m-tolyl]phosphorothioate.

(b) Specifications. (1) The drug is in liquid form containing 3 percent of fenthion.

(2) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(3) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.


§ 524.920 Fenthion.

(a) Chemical name. O,O-Dimethyl O-[4-(methylthio)-m-tolyl]phosphorothioate.

(b) Specifications. (1) The drug is in liquid form containing 3 percent of fenthion.

(2) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(3) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.


524.920 Fenthion.

(a) Chemical name. O,O-Dimethyl O-[4-(methylthio)-m-tolyl]phosphorothioate.

(b) Specifications. (1) The drug is in liquid form containing 3 percent of fenthion.

(2) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(3) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.


§ 524.920 Fenthion.

(a) Chemical name. O,O-Dimethyl O-[4-(methylthio)-m-tolyl]phosphorothioate.

(b) Specifications. (1) The drug is in liquid form containing 3 percent of fenthion.

(2) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(3) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.


§ 524.920 Fenthion.

(a) Chemical name. O,O-Dimethyl O-[4-(methylthio)-m-tolyl]phosphorothioate.

(b) Specifications. (1) The drug is in liquid form containing 3 percent of fenthion.

(2) Sponsor. See No. 000859 in §510.600(c) of this chapter.

(3) Special considerations. Do not use on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhibiting drugs, pesticides, or chemicals.

§ 524.960 Flumethasone, neomycin sulfate, and polymyxin B sulfate ophthalmic solutions.

(a) Specifications. Each milliliter of ophthalmic preparation contains 0.10 milligram flumethasone, 5.0 milligrams neomycin sulfate (3.5 milligrams neomycin base), and 10,000 units of polymyxin B sulfate, with or without hydroxypropyl methylcellulose.
§ 524.981c Fluocinolone acetonide ophthalmic and topical dosage forms.

(a) Specifications. The drug contains 0.025 percent fluocinolone acetonide.

(b) Sponsor. See No. 099207 in §510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is indicated for the relief of pruritus and inflammation associated with superficial acute and chronic dermatoses in dogs. It is used in the treatment of allergic and acute moist dermatitis and for the relief of superficial inflammation caused by chemical and physical abrasions and burns.

(2) A small amount is applied to the affected area two or three times daily.

(3) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 62 FR 40932, July 31, 1997]

§ 524.981b Fluocinolone acetonide solution.

(a) Specifications. The drug contains 0.01 percent fluocinolone acetonide in propylene glycol with citric acid.

(b) Sponsor. See No. 099207 in §510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is indicated for the relief of pruritus and inflammation associated with otitis externa and certain superficial acute and chronic dermatoses in the dog. It is also indicated for the relief of pruritus and inflammation associated with acute otitis externa and certain superficial acute and chronic dermatoses in the cat.

(2) A small amount of solution is applied to the affected area 2 or 3 times daily.

(3) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 62 FR 40932, July 31, 1997]

§ 524.981c Fluocinolone acetonide, neomycin sulfate cream.

(a) Specifications. The drug contains 0.025 percent fluocinolone acetonide and 0.5 percent neomycin sulfate (0.35 percent neomycin base).

(b) Sponsor. See No. 099207 in §510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is used in the relief of pruritus and inflammation associated with superficial acute and chronic dermatoses in dogs. It is used in the treatment of such conditions as allergic and acute moist...
§ 524.981d Fluocinolone acetonide, dimethyl sulfoxide solution.

(a) Specifications. Each milliliter of solution contains 0.01 percent fluocinolone acetonide and 20 percent dimethyl sulfoxide with propylene glycol and citric acid.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is used in dogs for the relief of impaction commonly present in apparently normal anal sacs, for the reversal of inflammatory changes associated with abnormal anal sacs, and to counteract the offensive odor of anal sac secretions.

(2) It is administered by instillation of 1 to 2 milliliters into each anal sac following expression of anal sac contents. It may be necessary to repeat treatment at 60-day intervals to maintain an odor-free state. The total dosage used should not exceed 2 milliliters per anal sac per treatment.

(3) For use only by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 61 FR 5507, Feb. 13, 1996]

§ 524.981e Fluocinolone acetonide, dimethyl sulfoxide otic solution.

(a) Specifications. Each milliliter of solution contains 0.01 percent fluocinolone acetonide in 60 percent dimethyl sulfoxide with propylene glycol and citric acid.

(b) Sponsor. See No. 053501 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is used in dogs for the relief of pruritis and inflammation associated with acute and chronic otitis.

(2) It is administered at 4 to 6 drops (0.2 milliliter) twice daily into the ear canal for a maximum period of 14 days. The total dosage used should not exceed 17 milliliters. The ear canal should be cleansed by some appropriate method prior to instillation of the solution and the ear should be massaged gently following instillation.

(3) There should be careful initial evaluation and followup of infected ears. Incomplete response or exacerbation of corticosteroid-responsive lesions may be due to the presence of an infection which requires identification or antibiotic sensitivity testing, and the use of the appropriate antimicrobial agent. As with any corticosteroid, animals with a generalized infection should not be treated with this product without proper supportive antimicrobial therapy. Preparations with dimethyl sulfoxide should not be used in pregnant animals. For use by or on the order of a licensed veterinarian.

§ 524.1005 Furazolidone aerosol powder.

(a) Specifications. The product contains 4 or 10 percent furazolidone in inert dispersing agent and propellant.

(b) Sponsors. (1) See No. 053501 in § 510.600(c) of this chapter for use as in paragraphs (c)(1), (c)(2)(i), (c)(2)(ii), and (c)(3) of this section.

(2) See No. 017135 for use of the 4 percent product as in paragraph (c)(2)(iv) of this section.

(c) Conditions of use—(1) Amount. Hold container about 6 to 12 inches from the eye or affected area and apply only enough powder to impart a light yellow color.

(2) Indications of use—(i) Dogs. For treatment or prevention of bacterial infection of superficial wounds, abrasions, lacerations, and pyogenic dermatitis.

(ii) Horses. For treatment or prevention of bacterial infection of superficial wounds, abrasions, lacerations, and following firing (heat or electrocautery).

(iii) [Reserved]

(iv) Horses and ponies. For treatment or prevention of bacterial infection of superficial wounds, abrasions, and lacerations caused by Staphylococcus aureus, Streptococcus spp. and Proteus spp. sensitive to furazolidone.

(3) Limitations. For topical application in horses, ponies, and dogs: Clean affected area thoroughly, apply drug...
once or twice daily, and repeat treat-
m ent as required. Use only as re-
com m mend ed by a veterinarian in treat-
m ent of puncture wounds, wounds re-
quiring surgical debridement or sutur-
 ing, those of a chronic nature involving
proud flesh, generalized and chronic in-
f ections of the skin, and those skin
conditions associated with intense
itching. If redness, irritation, or swell-
ing persists or increases, discontinue
use and consult a veterinarian. Not for
use in horses intended for food.

§ 524.1044 Gentamicin sulfate oph-
thalmic and topical dosage forms.

§ 524.1044a Gentamicin ophthalmic so-
lution.

(a) Specifications. Each milliliter of
sterile aqueous solution contains
gentamicin sulfate equivalent to 3 mil-
ligrams of gentamicin.

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

(c) Conditions of use. (1) The drug is
used in dogs and cats for the topical
treatment of infections of the con-
junctiva caused by susceptible bac-
teria.

(2) Administer 1 or 2 drops into the
conjunctival sac 2 to 4 times a day.

(3) Federal law restricts this drug to
use by or on the order of a licensed vet-
erinarian.

[41 FR 14189, Apr. 2, 1976, as amended at 52
FR 7832, Mar. 13, 1987]

§ 524.1044b Gentamicin sulfate,
betamethasone valerate otic solution.

(a) Specifications. Each milliliter of
solution contains gentamicin sulfate equivalent to 3 milligrams (mg)
gentamicin base and betamethasone
valerate equivalent to 1 mg
betamethasone alcohol.

(b) Sponsors. See Nos. 000061 and 054925 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Amounts and indications for use—(i) For the treat-
m ent of acute and chronic canal otitis externa caused by bacteria sensitive to gentamicin in dogs, instill three to
eight drops of solution into the ear
canal twice daily for 7 to 14 days.

(ii) For the treatment of infected superficial lesions caused by bacteria
sensitive to gentamicin in dogs and
cats, apply a sufficient amount of the
drug to cover the treatment area twice
daily for 7 to 14 days.

(2) Limitations. Federal law restricts
this drug to use by or on the order of a
licensed veterinarian.

[71 FR 13542, Mar. 16, 2006]

§ 524.1044c Gentamicin sulfate oph-
thalmic ointment.

§ 524.1044d Gentamicin sulfate,
betamethasone valerate ointment.

(a) Specifications. Each gram of oint-
ment contains gentamicin sulfate equivalent to 3 milligrams of
gentamicin.

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

(c) Conditions of use—(1) Amount. Apply approximately a 1/2-inch strip to the affected eye 2 to 4
times a day.

(2) Indications for use. For treatment
of conjunctivitis caused by susceptible bacteria.

(3) Limitations. Federal law restricts
this drug to use by or on the order of a
licensed veterinarian.

[69 FR 47363, Aug. 5, 2004]
Excessive hair should be clipped from the treatment area of the external ear.

(ii) For the treatment of canine infected superficial lesions, the lesion and adjacent area should be properly cleaned before treatment. Excessive hair should be removed. A sufficient amount of the drug should be applied to cover the treatment area. The drug should be administered twice daily for 7 to 14 days.

(3) If hypersensitivity to any of the components occurs, treatment should be discontinued and appropriate therapy instituted. Concomitant use of drugs known to induce ototoxicity should be avoided. Observe patients for signs of adrenocorticoid overdosage. The antibiotic susceptibility of the pathogenic organism should be determined prior to use of this preparation. Administration of recommended doses beyond 7 days may result in delayed wound healing. Animals treated longer than 7 days should be monitored closely.

(4) For use by or on the order of a licensed veterinarian.

§ 524.1044f Gentamicin sulfate, betamethasone valerate topical spray.

(a) Specifications. Each milliliter of spray contains gentamicin sulfate equivalent to 0.57 milligram (mg) gentamicin base and betamethasone valerate equivalent to 0.284 mg betamethasone.

(b) Sponsors. See Nos. 000061 and 054925 in §510.600(c) of this chapter.

(c) Conditions of use in dogs—(1) Amount. Hold bottle upright 3 to 6 inches from the lesion and depress the sprayer head twice. Administer two spray actuations two to four times daily for 7 days.

(2) Indications for use. For the treatment of infected superficial lesions caused by bacteria sensitive to gentamicin.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.1044g Gentamicin sulfate, betamethasone valerate, clotrimazole ointment.

(a) Specifications. Each gram (g) of ointment contains gentamicin sulfate equivalent to 1.07 milligrams of gentamicin.

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

(c) Conditions of use in dogs—(1) Amount. Instill ointment twice daily into the ear canal. Therapy should continue for 7 consecutive days.

(1) From 7.5- or 15-gram (g) tubes, 10-, 12.5-, 20-, or 215-g bottles: 4 drops for dogs weighing less than 30 pounds (lb) or 8 drops for dogs weighing 30 lb or more.
(i) From 20- or 215-g bottles: 2 drops for dogs weighing less than 30 lb or 4 drops for dogs weighing 30 lb or more.

(2) Indications for use. For the treatment of acute and chronic canine otitis externa associated with yeast (Malassezia pachydermatis, formerly Pityrosporum canis) and/or bacteria susceptible to gentamicin.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.


§ 524.1044h Gentamicin sulfate, mometasone furoate, clotrimazole otic suspension.

(a) Specifications. Each gram contains gentamicin sulfate, United States Pharmacopeia (USP) equivalent to 3 milligram (mg) gentamicin base, mometasone furoate monohydrate equivalent to 1 mg mometasone, and 10 mg clotrimazole, USP.

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

(c) Conditions of use in dogs—(1) Amount. For dogs weighing less than 30 pounds (lb), instill 4 drops from the 7.5-, 15-, or 30-gm bottle into the ear canal (2 drops from the 215-gm bottle) or, for dogs weighing 30 lb or more, instill 8 drops from the 7.5-, 15-, or 30-gm bottle into the ear canal (4 drops from the 215-gm bottle), once or twice daily for 7 days.

(2) Indications for use. For the treatment of otitis externa caused by susceptible strains of yeast (Malassezia pachydermatis) and bacteria (Pseudomonas spp. [including P. aeruginosa], coagulase-positive staphylococci, Enterococcus faecalis, Proteus mirabilis, and beta-hemolytic streptococci).


§ 524.1140 Imidacloprid and ivermectin.

(a) Specifications. The product is available in unit applicator tubes containing 0.4, 1.0, 2.5, or 4.0 milliliters (mL). Each mL of solution contains 100 milligrams (mg) imidacloprid and 800 micrograms (µg) ivermectin.

(b) Sponsor. See No. 000859 in § 510.600(c) of this chapter.

(c) Conditions of Use in Dogs—(1) Amount. The recommended minimum dosage is 4.5 mg/pound (lb) (10 mg/kilogram [kg]) of imidacloprid and 36.4 µg/lb (80 µg/kg) of ivermectin, topically once a month.

(2) Indications for Use. For the prevention of heartworm disease caused by Dirofilaria immitis; kills adult fleas and is indicated for the treatment of flea infestations (Ctenocephalides felis).

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[67 FR 78685, Dec. 26, 2002]

§ 524.1193 Ivermectin pour-on.

(a) Specifications. Each milliliter (mL) of solution contains 5 milligrams of ivermectin.

(b) Sponsor. See sponsors in § 510.600(c) of this chapter for use as in paragraph (e) of this section.

(1) No. 050604 for use as in paragraphs (e)(1), (e)(2)(i), (e)(2)(iii), and (e)(3) of this section.

(2) Nos. 051311, 054925, 055529, 058829, 059130, and 066916 for use as in paragraphs (e)(1), (e)(2)(i), (e)(2)(ii), and (e)(3) of this section.

(c) Related tolerances. See § 556.344 of this chapter.

(d) Special considerations. See § 500.25 of this chapter.

(e) Conditions of use in cattle—(1) Amount. One mL per 22 pounds (0.5 milligram per kilogram) of body weight applied topically to the back of the animal.

(2) Indications for use—(i) It is used for the treatment and control of: Gastrointestinal roundworms (adults and fourth-stage larvae) Ostertagia ostertagi (including inhibited stage), Haemonchus placei, Trichostrongylus axei, T. colubriformis, Cooperia oncophora, C. punctata, C. surnabada, Oesophagostomum radiatum; (adults) Strongyloides papillosus, Trichuris spp.; lungworms (adults and fourth-stage larvae) Dictyocaulus viviparus; cattle grubs (parasitic stages) Hypoderma bovis, H. lineatum; mites Sarcoptes scabei var. bovis; lice Linognathus vituli, Haematopinus eurysternus, Damalinia bovis, Solenoptes capillatus; and horn flies Haematobia irritans.

313
§ 524.1195 Ivermectin otic suspension.

(a) Specifications. Each tube contains 0.5 milliliter (mL) of a 0.01 percent suspension of ivermectin.

(b) Sponsor. See No. 065274 in §510.600(c) of this chapter.

(c) Conditions of use. For the treatment of adult ear mite (Otodectes cynotis) infestations in cats and kittens 4 weeks of age and older. Effectiveness against eggs and immature stages has not been proven.

[66 FR 7578, Jan. 24, 2001]

§ 524.1200b Kanamycin ophthalmic aqueous solution.

(a) Specifications. The drug, which is in an aqueous solution including suitable and harmless preservatives and buffer substances, contains 10 milligrams of kanamycin activity (as the sulfate) per milliliter of solution.

(b) Sponsor. See No. 000856 in §510.600(c) of this chapter.

(c) Conditions of use. It is indicated for use in dogs in various eye infections due to kanamycin sensitive bacteria. It is used treating conditions such as conjunctivitis, blepharitis, dacyrcoytis, keratitis, and corneal ulcerations and as a prophylactic in traumatic conditions, removal of foreign bodies, and intraocular surgery. Apply a thin film to the affected eye three or four times daily or more frequently if deemed advisable. Treatment should be continued for at least 48 hours after the eye appears normal. For use only by or on the order of a licensed veterinarian.

[40 FR 13858, Mar. 27, 1975, as amended at 53 FR 27651, July 25, 1988; 64 FR 404, Jan. 5, 1999]

§ 524.1204 Kanamycin sulfate, calcium amphomycin, and hydrocortisone acetate.

(a) Specifications. The drug, which is in a suitable and harmless ointment base, contains 3.5 milligrams of kanamycin activity (as the sulfate) per gram of ointment.
amphomycin. It conforms to the following specifications:

(i) Its potency is not less than 863 micrograms of amphomycin per milligram;
(ii) Its moisture content is not more than 10 percent; and
(iii) Its pH in a 2-percent aqueous suspension is 6.0 to 7.5.

(2) The drug is in a water-miscible ointment or cream base and each gram of ointment or cream contains: 5.0 milligrams of kanamycin activity as the sulfate, 5.0 milligrams of amphomycin activity as the calcium salt, and 10.0 milligrams of hydrocortisone acetate.

(b) Sponsor. See No. 000856 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) It is indicated for use in dogs in the following conditions associated with bacterial infections caused by organisms susceptible to one or both antibiotics: Acute otitis externa, furunculosis, folliculitis, pruritus, anal gland infections, erythema, decubital ulcer, superficial wounds, and superficial abscesses.

(2) The ointment should be applied to the affected areas of the skin at least twice daily. In severe or widespread lesions it may be desirable to apply the ointment more than twice daily. After some improvement is observed, treatment can usually be reduced to once daily. Before application, hair in the affected area should be closely clipped and the area should be thoroughly cleansed of crusts, scales, dirt, or other detritus. When treating infections of the anal gland, the drug should be introduced into the orifice of the gland and not through any fistulous tract. If no response is evident in 7 days, diagnosis and therapy should be reevaluated.

(3) For use only by or on the order of a licensed veterinarian.

§ 524.1376 2-Mercaptobenzothiazole solution.

(a) Specifications. The drug contains 1.3 percent 2-mercaptobenzothiazole in a suitable solvent.

(b) Sponsor. See 017135 in § 510.600(c) of this chapter.

(c) Conditions of use—(1) Amount. Apply twice daily to affected area.

(2) Indications for use. For dogs as an aid in the treatment of hot spots (moist dermatitis) and as first aid for scrapes and abrasions.

(3) Limitations. Clip hair from affected area before applying. If no improvement is seen within 1 week, consult a veterinarian.

§ 524.1443 Miconazole.

(a) Specifications—(1) Each gram of cream contains miconazole nitrate equivalent to 20 milligrams miconazole base.
§ 524.1446 Milbemycin oxime solution.

(a) Specifications. Each tube contains 0.25 milliliter of a 0.1 percent solution of milbemycin oxime.

(b) Sponsor. See No. 058198 in §510.600(c) of this chapter.

(c) Conditions of use. (1) Amount. One tube administered topically into each external ear canal.

(2) Indications for use. For the treatment of ear mite (Otodectes cynotis) infestations in cats and kittens 4 weeks of age and older. Effectiveness is maintained throughout the life cycle of the ear mite.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.1451 Moxidectin.

(a) Specifications. Each milliliter contains 5 milligrams of moxidectin (0.5 percent solution).

(b) Sponsor. See No. 000856 in §510.600(c) of this chapter.

(c) Related tolerances. See §556.426 of this chapter.
Food and Drug Administration, HHS

§ 524.1484 Neomycin sulfate ophthalmic and topical dosage forms.

§ 524.1484a Neomycin sulfate ophthalmic ointment.

(a) Specifications. Each gram of the ointment contains 5 milligrams of neomycin sulfate equivalent in activity to 3.5 milligrams of neomycin base.

(b) Sponsor. See No. 017030 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is intended for use in dogs and cats for the treatment of superficial ocular bacterial infections limited to the conjunctival or the anterior segment of the eye.

(2) The drug is applied four times each day.

(3) The drug is applied by inserting the tip of the tube beneath the lower lid and by expressing a small quantity of ointment into the conjunctival sac. The tip of the tube should not come in contact with the eye surface.

(4) Severe infections should be supplemented by systemic therapy.

(5) Prolonged administration of the drug may permit overgrowth of organisms that are not susceptible to neomycin. If new infections due to bacteria or fungi appear during therapy, appropriate measures should be taken.

(6) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 43 FR 18172, Apr. 28, 1978]

§ 524.1484c Neomycin sulfate, isoflupredone acetate, tetracaine hydrochloride ointment.

(a) Specifications. The product contains 5 milligrams of neomycin sulfate, equivalent to 3.5 milligrams of neomycin base, 1 milligram of isoflupredone acetate, and 5 milligrams of tetracaine hydrochloride in each gram of ointment.

(b) Sponsor. See No. 000009 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) It is used in treating such conditions as acute otitis externa in dogs and to a lesser degree, chronic otitis externa in dogs. It is also effective in treating anal gland infections and moist dermatitis in the dog and is a useful dressing for minor cuts, lacerations, abrasions, and post-surgical therapy in the horse, cat, and dog. It may also be used following amputation of dewclaws, tails, and claws, following ear trimming and castrating operations.

(2) In treatment of otitis externa and other inflammatory conditions of the...
§ 524.1484d Neomycin sulfate, hydrocortisone acetate, tetracaine hydrochloride ear ointment.

(a) Specifications. The product contains 5 milligrams of neomycin sulfate, equivalent to 3.5 milligrams of neomycin base, 5 milligrams of hydrocortisone acetate, and 5 milligrams of tetracaine hydrochloride in each gram of ointment.

(b) Sponsor. See No. 000099 in §510.600(c) of this chapter.

(c) Conditions of use. (1) It is indicated for treating acute otitis externa and, to a lesser degree, chronic otitis externa in dogs and cats. In treatment of ear canker and other inflammatory conditions of the external ear canal, a quantity of ointment sufficient to fill the external ear canal may be applied one to three times daily.\(^1\)

(2) Tetracaine and neomycin have the potential to sensitize. Care should be taken to observe animals being treated for evidence of hypersensitivity or allergy to the drug. If such signs are noted, therapy with the drug should be stopped. Treatment should be limited to the period when local anesthesia is essential to control self-inflicted trauma.

(3) Federal law restricts this drug to use by or on the order of a licensed veterinarian.\(^1\)

\(^{1}\)These 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.

§ 524.1484e Neomycin sulfate and polymyxin B sulfate ophthalmic solution.

(a) Specifications. Each milliliter of the ophthalmic preparation contains 5.0 milligrams neomycin sulfate (3.5 milligrams neomycin base), and 10,000 Units of polymyxin B sulfate.

(b) Sponsor. See No. 000856 in §510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is recommended for the treatment of bacterial infections associated with topical ophthalmological conditions such as corneal injuries, superficial keratitis, conjunctivitis, keratoconjunctivitis, and blepharitis in the dog.

(2) The recommended dosage is 1 to 2 drops per eye every 6 hours.

(3) In treating ophthalmological conditions associated with bacterial infections the drug is contraindicated in those cases in which microorganisms are nonsusceptible to the antibiotics incorporated in the drug.

(4) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.1484f Neomycin sulfate, prednisolone acetate, tetracaine hydrochloride ear drops.

(a) Specifications. The product contains 5 milligrams of neomycin sulfate equivalent to 3.5 milligrams of neomycin base, 2.5 milligrams of prednisolone acetate, and 5 milligrams of tetracaine hydrochloride in each milliliter of sterile suspension.
§ 524.1484i Neomycin sulfate, hydrocortisone acetate, sterile ointment.

(a) Specifications. The drug contains 5 milligrams of neomycin sulfate, equivalent to 3.5 milligrams of neomycin.

(b) Sponsor. See No. 000009 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) In treating dermatoses affecting areas other than the ear, the surface of the lesions should be well moistened (two to four drops per square inch) twice daily. In treating otitis externa, five to 15 drops of the drug should be instilled in the ear twice daily. The drug is limited to 7 days maximum duration of administration.

(3) For use only by or on order of a licensed veterinarian.

§ 524.1484h Neomycin, penicillin, polymyxin, hydrocortisone suspension.

(a) Specifications. Each milliliter of suspension contains 25 milligrams of neomycin sulfate equivalent to 17.5 milligrams of neomycin, 10,000 international units of penicillin G procaine, 5,000 international units of polymyxin B sulfate, 2 milligrams of hydrocortisone acetate, and 1.25 milligrams of hydrocortisone sodium succinate.

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

(c) Special considerations. The labeling shall state: This medication contains penicillin. Allergic reactions in humans are known to occur from topical exposure to penicillin.

(d) Conditions of use—dogs—(1) Amount. Rub a small amount into the involved area 1 to 3 times a day. After definite improvement, it may be applied once a day or every other day.

(2) Indications for use. Treatment of summer eczema, atopic dermatitis, interdigital eczema, and otitis externa caused by bacteria susceptible to neomycin, penicillin, and polymyxin B.

(3) Limitations. For use in dogs only. Shake drug thoroughly and clean lesion before using. If redness, irritation, or swelling persists or increases, discontinue use and reevaluate diagnosis. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[59 FR 5105, Feb. 3, 1994]

§ 524.1484g Neomycin sulfate-thiabendazole-dexamethasone solution.

(a) Specifications. Each cubic centimeter of neomycin sulfate-thiabendazole-dexamethasone solution contains: 40 milligrams of thiabendazole, 3.2 milligrams of neomycin (from neomycin sulfate), and 1 milligram of dexamethasone.

(b) Sponsor. See No. 050604 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is recommended for use as an aid in the treatment of bacterial, mycotic, and inflammatory dermatoses and otitis externa in dogs and cats.

(2) In treating dermatoses affecting areas other than the ear, the surface of the lesions should be well moistened (two to four drops per square inch) twice daily. In treating otitis externa, five to 15 drops of the drug should be instilled in the ear twice daily. The drug is limited to 7 days maximum duration of administration.

(3) For use only by or on order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 62 FR 63271, Nov. 28, 1997]

§ 524.1484i Neomycin sulfate, hydrocortisone acetate, sterile ointment.

(a) Specifications. The drug contains 5 milligrams of neomycin sulfate, equivalent to 3.5 milligrams of neomycin.

(b) Sponsor. See No. 000009 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) It is useful in treating such conditions as acute otitis externa and, to a lesser degree, chronic otitis externa in dogs and cats. It is indicated as treatment or adjunctive therapy of certain ear conditions in dogs and cats caused by or associated with neomycin-susceptible organisms and/or allergy. In otitis externa, 2 to 6 drops may be placed in the external ear canal two or three times daily.\footnote{These 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.}
§ 524.1484j Neomycin sulfate, prednisolone, tetracaine, and squalene topical-otic suspension.

(a) Specifications. Each milliliter of suspension contains 5 milligrams neomycin sulfate (equivalent to 3.5 milligrams neomycin base), 2 milligrams prednisolone, 5 milligrams tetracaine, and 0.25 milliliter squalane.

(b) Sponsor. See 017030 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Amount. Apply three or four times daily into the conjunctival sac. With improvement, frequency may be reduced to two or three times daily. For treatment of ear canker and other inflammatory conditions of the external ear canal, fill external ear canal one to three times daily.

(2) Indications for use. For treating infections, allergic, and traumatic keratitis, conjunctivitis, acute otitis externa and, to a lesser degree, chronic otitis externa in dogs and cats.

(3) Limitations. All topical ophthalmic preparations containing corticosteroids, with or without an antimicrobial agent, are contraindicated in the initial treatment of corneal ulcers. They should not be used until infection is under control and corneal regeneration is well underway. Incomplete response or exacerbation of corticosteroid responsive lesions may be due to the presence of nonsusceptible organisms or to prolonged use on antibiotic-containing preparations resulting in overgrowth of nonsusceptible organisms, particularly Monilia. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.1484j [Reserved]

§ 524.1484j Nitrofurazone ophthalmic and topical dosage forms.

§ 524.1580 Nitrofurazone ointment.

(a) Specifications. The drug contains 0.2 percent nitrofurazone in a watersoluble base.

(b) Sponsors. See sponsors in §510.600(c) of this chapter.

(1) See Nos. 000010, 000069, 050749, 054925, 058005, and 061623 for use on dogs, cats, or horses.

(2) See No. 017135 for use on dogs and horses.

(c) [Reserved]

(d) Conditions of use—(1) Amount. Apply directly on the lesion with a spatula or first place on a piece of gauze. The preparation should remain on the lesion for at least 24 hours. Use of a bandage is optional.

(2) Indications for use. For prevention or treatment of surface bacterial infections of wounds, burns, and cutaneous ulcers of dogs, cats, or horses.

(3) Limitations. For use only on dogs, cats, and horses (not for food use). In case of deep or puncture wounds or serious burns, use only as recommended by veterinarian. If redness, irritation,
or swelling persists or increases, discontinue use; consult veterinarian.


§ 524.1580c Nitrofurazone soluble powder.

(a) Specifications. The drug contains 0.2 percent nitrofurazone in a water-soluble base.

(b) Sponsor. See Nos. 000010, 000069, and 050749 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Amount. Apply several times daily to the lesion or affected area from the plastic squeeze bottle.

(2) Indications for use. For prevention or treatment of surface bacterial infections of wounds, burns, skin ulcers, and abscesses after incision.1

(3) Limitations. In case of deep or puncture wounds or serious burns, use only as recommended by veterinarian. If redness, irritation, or swelling persists or increases, discontinue use; consult veterinarian. For use only on dogs, cats, and horses (not for food use).1


§ 524.1580d [Reserved]

§ 524.1580e Nitrofurazone ointment with butacaine sulfate.

(a) Specifications. The drug contains 0.2 percent nitrofurazone and 0.5 percent butacaine sulfate in a water-soluble base.

(b) Sponsor. See No. 054925 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Indications for use. For prevention or treatment of surface bacterial infections of ears, wounds, burns, and cutaneous ulcers of dogs, cats, and horses.1

(2) Limitations. Apply directly on the lesion with a spatula or first place on a piece of gauze. Use of a bandage is optional. The preparation should remain on the lesion for at least 24 hours. The dressing may be changed several times daily or left on the lesion for a longer period. For use only on dogs, cats, and horses (not for food use). In case of deep or puncture wounds or serious burns, use only as recommended by a veterinarian. If redness, irritation, or swelling persists or increases, discontinue use; consult veterinarian.1


§ 524.1600a Nystatin, neomycin, thiostrepton, and triamcinolone acetonide ointment.

(a) Specifications. Each milliliter of petrolatum base or each gram of vanishing cream base ointment contains: 100,000 units of nystatin; neomycin sulfate equivalent to 2.5 milligrams of neomycin base; 2,500 units of thiostrepton; and 1.0 milligram of triamcinolone acetonide.

(b) Sponsors. For petrolatum base ointments see 000069, 000856, 025463, 053501, and 054925 in §510.600(c) of this chapter. For vanishing cream base ointments see Nos. 025463, 053501, and 054925.

(c) Conditions of use—(1) Amount. (i) For topical dermatological use: Clean affected areas and remove any encrusted discharge or exudate, and apply sparingly either ointment in a thin film.

(ii) For otic use: Clean ear canal of impacted cerumen, remove any foreign bodies such as grass awns and ticks, and instill three to five drops of petrolatum base ointment. Preliminary use of a local anesthetic may be advisable.


§ 524.1600b Nystatin ophthalmic and topical dosage forms.

§ 524.1600a Nystatin, neomycin, thiostrepton, and triamcinolone acetonide ointment.
(iii) For infected anal glands and cystic areas: Drain gland or cyst and fill with petrolatum base ointment.

(2) **Indications for use.**

(i) **Topically:** Use either ointment in dogs and cats for anti-inflammatory, antipruritic, antifungal, and antibacterial treatment of superficial bacterial infections, and for dermatologic disorders characterized by inflammation and dry or exudative dermatitis, particularly associated with bacterial or candidal (Candida albicans) infections.

(ii) **Otitis, cysts, and anal gland infections:** Use petrolatum base ointment in dogs and cats for the treatment of acute and chronic otitis and interdigital cysts, and in dogs for anal gland infections.

(3) **Limitations.** For mild inflammations, use once daily to once a week. For severe conditions, apply initially two to three times daily, decreasing frequency as improvement occurs. Not intended for treatment of deep abscesses or deep-seated infections. Not for ophthalmic use. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 50 FR 41490, Oct. 11, 1985]
§ 524.1742 N-(Mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorodithioate) emulsifiable liquid.

(a) Specifications. The emulsifiable liquid contains 11.6 percent N-(mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorodithioate).

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

(c) Conditions of use—(1) Methods of application. Methods of application to control the following conditions on beef cattle:

<table>
<thead>
<tr>
<th>To control/method of use</th>
<th>Dilution rate (gal. drug: gal. of water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubs:</td>
<td>1:60</td>
</tr>
<tr>
<td>Dip</td>
<td>1:2</td>
</tr>
<tr>
<td>Pour-on</td>
<td>1:2 or 1:5</td>
</tr>
<tr>
<td>Spray</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Lice:</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Dip</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Southern cattle ticks:</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Spray</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Scabies mites:</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Dip</td>
<td>1:49 or 1:100</td>
</tr>
<tr>
<td>Lone Star Ticks:</td>
<td>1:49 or 1:100</td>
</tr>
</tbody>
</table>

(1) Dip vat procedure. (a) Prior to charging vat, empty old contents and thoroughly clean the vat. Dip vats should be calibrated to maintain an accurate dilution. Add water, then drug to the vat according to the dilution rate indicated in the table. Add super phosphate at a rate of 100 pounds per 1,000 gallons of vat solution. Super phosphate is added to control the pH of the solution and ensure vat stability. Super phosphate is usually available at most fertilizer dealers as 0–45–0 or 0–46–0. Stir the dip thoroughly, preferably with a compressed air device; however, any form of thorough mixing is adequate. Re-stir vat contents prior to each use. During the dipping operation, each time the dip’s volume is reduced by 1/8 to 1/4 of its initial volume, replenish with water and add the drug at a rate of 1 gallon for each 50 or 200 gallons water added—depending on dilution rate 1:60 or 1:240. Also add super...
phosphate as necessary to maintain pH between 4.5 and 6.5. Stir well and re-sume dipping. Repeat replenishment process as necessary. For evaporation, add additional water accordingly. For added water due to rainfall, merely re-plenish dip with the product according to directions. If overflow occurs, either analyze for drug concentration and ad-just accordingly or dispose of vat contents and recharge. Check pH after each addition of water or super phosphate to assure proper pH controls.

(b) Dip maintenance. (1) With use of dip vat tester, dipping may continue as long as the drug concentration is main-tained between 0.15 and 0.25 percent, and the dip is not too foul for satisfac-tory use as indicated by foul odor or excessive darkening (i.e., color changes from beige to very dark brown).

(2) Without use of dip vat tester, vat should be emptied, cleaned, and re-charged each time one of the following occurs: When the dip has been charged for 120 days; when the dip becomes too foul for satisfactory use, within the 120-day limit; if the number of animals dipped equals twice the number of gal-lons of the initial dip volume, within the 120-day limit.

(ii) Spray method. To prepare the spray, mix drug with water according to table and stir thoroughly. Apply the fresh mixture as a high-pressure spray, taking care to wet the skin, not just the hair. Apply to the point of “run-off,” about 1 gallon of diluted spray per adult animal. Lesser amounts will per-mit runoff for younger animals.

(iii) Pour-on method. Dilute the drug with water according to table by slow-ly adding water to the product while stirring. Apply 1 ounce of the diluted mixture per 100 pounds of body weight (to a maximum of 8 ounces per head) down the center line of the back.

(2) Timing of applications for cattle grub control. For optimum cattle grub control, it is important to treat as soon as possible after the heel fly sea-son, before the grub larvae reach the gullet or spinal canal, as the rapid kill of large numbers of larvae in these tis-sues may cause toxic side effects, such as bloat, salivation, staggering, and pa-ralysis.

(3) Treatment regimens. (i) Control of scabies mites requires two treatments, 10 to 14 days apart.

(ii) Control of Lone Star Ticks and hornflies requires two treatments, 7 days apart.

(4) Warnings. The drug is a cholinesterase inhibitor. Do not use this drug on animals simultaneously or within a few days before or after treatment with or exposure to cholinesterase-inhib-iting drugs, pesticides, or chemicals. Do not apply within 21 days of slaugh-ter. For use on beef cattle only. Do not treat sick, convalescent, or stressed cattle, or calves less than 3 months old except in Federal or State eradication programs where immediate treatment of all animals in an infested herd is mandatory. Be sure free access to drinking water is available to cattle prior to dipping. Do not dip excessively thirsty animals. Do not dip animals when overheated. Repeat treatment as necessary but not more often than every 7 to 10 days. Treatment for lice, ticks, hornflies, and scabies mites may be made any time of the year except when cattle grub larvae are in the gullet or spinal canal. Treatment for lice, ticks, and scabies mites may be made any time 7 to 10 days following treat-ment for grubs. Do not treat grubs when the grub larvae are in the gullet or spinal canal. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Wear rubber gloves, gog-gles, and protective clothing. In case of skin contact, wash immediately with soap and water; for eyes, flush with water. Wash all contaminated clothing with soap and hot water before re-use.

(d) Related tolerances. See 40 CFR 180.261.

§524.1880 Prednisolone-neomycin sul-fate ophthalmic ointment.

(a) Specifications. Prednisolone-neo-mycin sulfate ophthalmic ointment contains 2 milligrams prednisolone and 5 milligrams neomycin sulfate (equiva- lent to 3.5 milligrams neomycin base) in each gram of ointment.
Food and Drug Administration, HHS

§ 524.1982 Proparacaine hydrochloride ophthalmic solution.

(a) Specifications. The drug is an aqueous solution containing 0.5 percent

control and corneal regeneration is well under way.

(4) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 524.1883 Prednisolone sodium phosphate-neomycin sulfate ophthalmic ointment.

(a) Specifications. Prednisolone sodium phosphate-neomycin sulfate ophthalmic ointment contains prednisolone sodium phosphate equivalent to 2.5 milligrams prednisolone 21-phosphate and 5 milligrams neomycin sulfate (equivalent to 3.5 milligrams neomycin base) in each gram of ointment.

(b) Sponsor. See No. 050604 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is recommended for use in superficial ocular inflammations or infections limited to the conjunctiva or the anterior segment of the eye of cats and dogs, such as those associated with allergic reactions or gross irritants.

(2) A small quantity of the ointment should be expressed into the conjunctival sac 4 times a day for 7 days. After 7 days, if clinical improvement is not noted, reevaluation of the diagnosis should be considered. All topical ophthalmic preparations containing corticosteroids with or without an antimicrobial agent are contraindicated in the initial treatment of corneal ulcers. They should not be used until the infection is under control and corneal regeneration is well under way. For use only by or on the order of a licensed veterinarian.

§ 524.1881 Prednisolone acetate ophthalmic and topical dosage forms.

§ 524.1881a [Reserved]

§ 524.1881b Prednisolone acetate-neomycin sulfate sterile suspension.

(a) Specifications. Prednisolone acetate-neomycin sulfate sterile suspension contains 2.5 milligrams of prednisolone acetate and 5 milligrams of neomycin sulfate (equivalent to 3.5 milligrams of neomycin base) in each milliliter of sterile suspension.

(b) Sponsor. See No. 000009 in § 510.600(c) of this chapter.

(c) Conditions of use. (1) The drug is indicated for treating infectious, allergic and traumatic keratitis and conjunctivitis, acute otitis externa, and chronic otitis externa in dogs and cats.

(2) For beginning treatment of acute ocular inflammations 1 or 2 drops may be placed in the conjunctival sac 3 to 6 times during a 24 hour period. When improvement occurs, the dosage may be reduced to 1 drop 2 to 4 times daily. In otitis externa, 2 to 6 drops may be placed in the external ear canal 2 or 3 times daily.

(3) All topical ophthalmic preparations containing corticosteroids with or without an antimicrobial agent are contraindicated in the initial treatment of corneal ulcers. They should not be used until the infection is under control and corneal regeneration is well under way.

(4) For use only by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 62 FR 63271, Nov. 28, 1997]
proparacaine hydrochloride, 2.45 percent glycerin as a stabilizer, and 0.2 percent chlorobutanol (cholal derivative) and 1:10,000 benzalkonium chloride as preservatives.

(b) Sponsor. See No. 053501 in §510.600(c) of this chapter.

(c) Special considerations. The longterm toxicity of proparacaine is unknown. Prolonged use may possibly delay wound healing.

(d) Conditions of use. (1) The drug is indicated for use as a topical ophthalmic anesthetic in animals. It is used as an anesthetic in cauterization of corneal ulcers, removal of foreign bodies and sutures from the cornea, and measurement of intraocular pressure (tonometry) when glaucoma is suspected. Local applications may also be used as an aid in the removal of foreign bodies from the nose and ear canal, as an accessory in the examination and treatment of painful otitis, in minor surgery, and prior to catheterization.

(2) It is administered as follows:

(i) For removal of sutures: Instill one to two drops 2 or 3 minutes before removal of stitches.

(ii) For removal of foreign bodies from eye, ear, and nose: For ophthalmic use, instill three to five drops in the eye prior to examination; for otic use, instill five to 10 drops in the ear; for nasal use, instill five to 10 drops in each nostril every 3 minutes for three doses.

(iii) For tonometry: Instill one to two drops immediately before measurement.

(iv) As an aid in treatment of otitis: Instill two drops into the ear every 5 minutes for three doses.

(v) For minor surgery: Instill one or more drops as required.

(vi) For catheterization: Instill two to three drops with a blunt 20-gauge needle immediately before inserting catheter.

(3) For use only by or on the order of a licensed veterinarian.

[40 FR 13873, Mar. 27, 1975, as amended at 50 FR 41490, Oct. 11, 1985]

§ 524.2098 Selenium disulfide suspension.

(a) Specifications. The product contains 0.9-percent weight in weight (w/w) selenium disulfide (1-percent weight in volume (w/v)).

(b) Sponsors. See Nos. 000061, 017135, and 050604 in §510.600(c) of this chapter.

(c) Conditions of use on dogs—(1) Indications for use. For use as a cleansing shampoo and as an agent for removing skin debris associated with dry eczema, seborrhea, and nonspecific dermatoses.

(2) Amount. One to 2 ounces per application.

(3) Limitations. Use carefully around scrotum and eyes, covering scrotum with petrolatum. Allow the shampoo to remain for 5 to 15 minutes before thorough rinsing. Repeat treatment once or twice a week. If conditions persist or if rash or irritation develops, discontinue use and consult a veterinarian.

§ 524.2350 Tolnaftate cream.

(a) Specifications. The drug contains 1 percent toltaftate (2-naphthyl-N-methyl-N-(3-tolyl) thionocarbamate) in an anhydrous cream base.

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

(c) Conditions of use. (1) The drug is indicated for treatment of ringworm lesions due to Microsporum canis and Microsporum gypseum in dogs and cats.

(2) A small amount of the cream is applied to the affected areas once or twice a day for 2 to 4 weeks. The areas to be treated are first cleared of exudate and the hair clipped if the areas are not already denuded. The cream is massaged into each lesion and immediate surrounding area until the cream is no longer visible.

(3) If no response is seen after 2 weeks of treatment with the drug the diagnosis should be reviewed.

(4) Federal law restricts this drug to use by or on the order of a licensed veterinarian.


§ 524.2481 Triamcinolone cream.

(a) Specifications. The vanishing cream contains 0.1 percent triamcinolone acetonide.

(b) Sponsor. See Nos. 053501 and 054925 in § 510.600(c) of this chapter.

(c) Conditions of use in dogs—(1) Amount. Rub into affected areas two to four times daily for 4 to 10 days.

(2) Indications for use. As an anti-inflammatory, anti-pruritic, and antiallergic agent for topical treatment of allergic dermatitis and summer eczema.

(3) Limitations. Federal law restricts this drug to use only by or on the order of a licensed veterinarian.

[71 FR 13542, Mar. 16, 2006]

§ 524.2482 Triamcinolone spray.

(a) Specifications. Each milliliter of solution contains 0.15 milligrams triamcinolone acetonide.

(b) Sponsor. See No. 017135 in § 510.600(c) of this chapter.

(c) Conditions of use in dogs—(1) Amount. Apply sufficient pump sprays to uniformly and thoroughly wet the affected areas while avoiding run off of excess product. Administer twice daily for 7 days, then once daily for 7 days, then every other day for an additional 14 days (28 days total).

(2) Indications for use. For the control of pruritus associated with allergic dermatitis.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[68 FR 4916, Jan. 31, 2003]

§ 524.2620 Liquid crystalline trypsin, Peru balsam, castor oil.

(a)(1) Specifications. The drug is a liquid for direct application or an aerosol preparation formulated so that each gram delivered to the wound site contains 0.12 milligram of crystalline trypsin, 87.0 milligrams of Peru balsam, and 788.0 milligrams of castor oil.

(2) Sponsor. See No. 067292 in § 510.600(c) of this chapter.

(b)(1) Specifications. The drug is a liquid for direct application or an aerosol preparation formulated so that each gram delivered to the wound site contains 0.1 milligram of crystalline trypsin, 72.5 milligrams of Peru balsam, and 800 milligrams of castor oil.

(b)(2) Sponsor. See No. 002794 in § 510.600(c) of this chapter.

(c) Conditions of use. The drug is used as an aid in the treatment of external wounds and assists healing by facilitating the removal of necrotic tissue, exudate and organic debris.