§ 529.2503  
(c) Conditions of use in horses—(1) Amount. Administer 6 grams daily by intrauterine infusion for 3 consecutive days during estrus.  
(2) Indications for use. For the treatment of endometritis caused by beta-hemolytic streptococci.  
(3) Limitations. Do not use in horses intended for human consumption. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[79 FR 10974, Feb. 27, 2014]

§ 529.2503  Tricaine methanesulfonate.  
(a) Specifications. The drug is ethyl-m-amino-benzoate methanesulfonate.  
(b) Sponsor. See Nos. 050378 and 051212 in §510.600(c) of this chapter.  
(c) Conditions of use—(1) Amount. It is used as follows:  
(i) Fish. The drug is added to ambient water at a concentration of from 15 to 330 milligrams per liter depending upon the degree of anesthetization or sedation desired, the species and size of the fish, and the temperature and softness of the water. Preliminary tests of solutions must be made with small numbers of fish to determine the desired rates of sedation or anesthesia and the appropriate exposure times for the specific lots of fish under prevailing conditions.  
(ii) Amphibians and other aquatic coldblooded animals. The drug is added to ambient water in concentrations of from 1:1000 to 1:20,000 depending upon species and stage of development.  
(2) Indications for use. For the temporary immobilization of fish, amphibians, and other aquatic coldblooded animals (poikilotherms) as an aid in handling during manual spawning (fish stripping), weighing, measuring, marking, surgical operations, transport, photography, and research.  
(3) Limitations. Do not use within 21 days of harvesting fish for food. Use in fish intended for food should be restricted to Ictaluridae, Salmonidae, Esocidae, and Percidae, and water temperature exceeding 10 °C (50 °F). In other fish and in coldblooded animals, the drug should be limited to hatchery or laboratory use.

[79 FR 10974, Feb. 27, 2014]

§ 529.2620  Triptorelin.  
(a) Specifications. Each milliliter of gel contains 100 micrograms (mcg) triptorelin as triptorelin acetate.  
(b) Sponsor. See No. 051233 in §510.600(c) of this chapter.  
(c) Conditions of use in swine—(1) Amount. Administer 200 mcg intravaginally approximately 96 hours after weaning.  
(2) Indications for use. For the synchronization of time of insemination in weaned sows to facilitate a single fixed-time artificial insemination.  
(3) Limitations. Not approved for use in gilts. Safety and effectiveness have not been evaluated in these animals. Should not be used in sows with obvious reproductive tract abnormalities.

[77 FR 64717, Oct. 23, 2012]
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§ 530.25 Orders prohibiting extralabel uses for drugs in food-producing animals.

Subpart D—Extralabel Use of Human and Animal Drugs in Animals Not Intended for Human Consumption

§ 530.30 Extralabel drug use in nonfood animals.

Subpart E—Safe Levels for Extralabel Use of Drugs in Animals and Drugs Prohibited From Extralabel Use in Animals

§ 530.40 Safe levels and availability of analytical methods.

§ 530.41 Drugs prohibited for extralabel use in animals.


SOURCE: 61 FR 57743, Nov. 7, 1996, unless otherwise noted.

Subpart A—General Provisions

§ 530.1 Scope.

This part applies to the extralabel use in an animal of any approved new animal drug or approved new human drug by or on the lawful order of a licensed veterinarian within the context of a valid veterinary-client-patient relationship.

§ 530.2 Purpose.

The purpose of this part is to establish conditions for extralabel use or intended extralabel use in animals by or on the lawful order of licensed veterinarians of Food and Drug Administration approved new animal drugs and approved new human drugs. Such use is limited to treatment modalities when the health of an animal is threatened or suffering or death may result from failure to treat. This section implements the Animal Medicinal Drug Use Clarification Act of 1994 (the AMDUCA) (Pub. L. 103–396).

§ 530.3 Definitions.

(a) Extralabel use means actual use or intended use of a drug in an animal in a manner that is not in accordance with the approved labeling. This includes, but is not limited to, use in species not listed in the labeling, use for indications (disease or other conditions) not listed in the labeling, use at dosage levels, frequencies, or routes of administration other than those stated in the labeling, and deviation from the labeled withdrawal time based on these different uses.

(b) FDA means the U.S. Food and Drug Administration.

(c) The phrase a reasonable probability that a drug's use may present a risk to the public health means that FDA has reason to believe that use of a drug may be likely to cause a potential adverse event.

(d) The phrase use of a drug may present a risk to the public health means that FDA has information that indicates that use of a drug may cause an adverse event.

(e) The phrase use of a drug presents a risk to the public health means that FDA has evidence that demonstrates that the use of a drug has caused or likely will cause an adverse event.

(f) A residue means any compound present in edible tissues that results from the use of a drug, and includes the drug, its metabolites, and any other substance formed in or on food because of the drug’s use.

(g) A safe level is a conservative estimate of a drug residue level in edible animal tissue derived from food safety data or other scientific information. Concentrations of residues in tissue below the safe level will not raise human food safety concerns. A safe level is not a safe concentration or a tolerance and does not indicate that an approval exists for the drug in that species or category of animal from which the food is derived.

(h) Veterinarian means a person licensed by a State or Territory to practice veterinary medicine.

(i) A valid veterinarian-client-patient relationship is one in which:

(1) A veterinarian has assumed the responsibility for making medical judgments regarding the health of (an) animal(s) and the need for medical treatment, and the client (the owner of the animal or animals or other caretaker) has agreed to follow the instructions of the veterinarian;

(2) There is sufficient knowledge of the animal(s) by the veterinarian to initiate at least a general or preliminary diagnosis of the medical condition of the animal(s); and
§ 530.4 Advertising and promotion.

Nothing in this part shall be construed as permitting the advertising or promotion of extralabel uses in animals of approved new animal drugs or approved human drugs.

§ 530.5 Veterinary records.

(a) As a condition of extralabel use permitted under this part, to permit FDA to ascertain any extralabel use or intended extralabel use of drugs that the agency has determined may present a risk to the public health, veterinarians shall maintain the following records of extralabel uses. Such records shall be legible, documented in an accurate and timely manner, and be readily accessible to permit prompt retrieval of information. Such records shall be adequate to substantiate the identification of the animals and shall be maintained either as individual records or, in food animal practices, on a group, herd, flock, or per-client basis. Records shall be adequate to provide the following information:

(1) The established name of the drug and its active ingredient, or if formulated from more than one ingredient, the established name of each ingredient;

(2) The condition treated;

(3) The species of the treated animal(s);

(4) The dosage administered;

(5) The duration of treatment;

(6) The numbers of animals treated; and

(7) The specified withdrawal, withholding, or discard time(s), if applicable, for meat, milk, eggs, or any food which might be derived from any food animals treated.

(b) A veterinarian shall keep all required records for 2 years or as otherwise required by Federal or State law, whichever is greater.

(c) Any person who is in charge, control, or custody of such records shall, upon request of a person designated by FDA, permit such person designated by FDA to, at all reasonable times, have access to, permit copying, and verify such records.

Subpart B—Rules and Provisions for Extralabel Uses of Drugs in Animals

§ 530.10 Provision permitting extralabel use of animal drugs.

An approved new animal drug or human drug intended to be used for an extralabel purpose in an animal is not unsafe under section 512 of the act and is exempt from the labeling requirements of section 502(f) of the act if such use is:

(a) By or on the lawful written or oral order of a licensed veterinarian within the context of a valid veterinarian-client-patient relationship; and

(b) In compliance with this part.

§ 530.11 Limitations.

In addition to uses which do not comply with the provision set forth in §530.10, the following specific extralabel uses are not permitted and result in the drug being deemed unsafe within the meaning of section 512 of the act:

(a) Extralabel use in an animal of an approved new animal drug or human drug by a lay person (except when under the supervision of a licensed veterinarian);

(b) Extralabel use of an approved new animal drug or human drug in or on an animal feed;

(c) Extralabel use resulting in any residue which may present a risk to the public health; and

(d) Extralabel use resulting in any residue above an established safe level, safe concentration or tolerance.

§ 530.12 Labeling.

Any human or animal drug prescribed and dispensed for extralabel use by a veterinarian or dispensed by a pharmacist on the order of a veterinarian shall bear or be accompanied by
§ 530.20 Conditions for permitted extralabel animal and human drug use in food-producing animals.

(a) The following conditions must be met for a permitted extralabel use in food-producing animals of approved new animal and human drugs:

(1) There is no approved new animal drug that is labeled for such use and that contains the same active ingredient which is in the required dosage form and concentration, except where a veterinarian finds, within the context of a valid veterinarian-client-patient relationship, that the approved new animal drug is clinically ineffective for its intended use.

(2) Prior to prescribing or dispensing an approved new animal or human drug for an extralabel use in food animals, the veterinarian must:

(i) Make a careful diagnosis and evaluation of the conditions for which the drug is to be used;

(ii) Establish a substantially extended withdrawal period prior to marketing of milk, meat, eggs, or other edible products supported by appropriate scientific information, if applicable;

(iii) Institute procedures to assure that the identity of the treated animal or animals is carefully maintained; and
§ 530.21 Prohibitions for food-producing animals.

(a) FDA may prohibit the extralabel use of an approved new animal or human drug or class of drugs in food-producing animals if FDA determines that:

(1) An acceptable analytical method needs to be established and such method has not been established or cannot be established; or

(2) The extralabel use of the drug or class of drugs presents a risk to the public health.

(b) A prohibition may be a general ban on the extralabel use of the drug or class of drugs or may be limited to a specific species, indication, dosage form, route of administration, or combination of factors.

§ 530.22 Safe levels and analytical methods for food-producing animals.

(a) FDA may establish a safe level for extralabel use of an approved human drug or an approved new animal drug when the agency finds that there is a reasonable probability that an extralabel use may present a risk to the public health. FDA may:

(1) Establish a finite safe level based on residue and metabolism information from available sources;

(2) Establish a safe level based on the lowest level that can be measured by a practical analytical method; or

(3) Establish a safe level based on other appropriate scientific, technical, or regulatory criteria.

(b) FDA may require the development of an acceptable analytical method for the quantification of residues above any safe level established under this part. If FDA requires the development of such an acceptable analytical method, the agency will publish notice of that requirement in the Federal Register.

(c) The extralabel use of an animal drug or human drug that results in residues exceeding a safe level established under this part is an unsafe use of such drug.

(d) If the agency establishes a safe level for a particular species or category of animals and a tolerance or safe concentration is later established through an approval for that particular species or category of animals, for that species or category of animals, the safe level is superseded by the tolerance or safe concentration for that species or category of animals.

§ 530.23 Procedure for setting and announcing safe levels.

(a) FDA may issue an order establishing a safe level for a residue of an extralabel use of an approved human drug or an approved animal drug. The agency will publish in the Federal Register a notice of the order. The notice will include:

(1) A statement setting forth the agency’s finding that there is a reasonable probability that extralabel use in animals of the human drug or animal drug may present a risk to the public health;

(2) A statement of the basis for that finding; and

(3) A request for public comments.

(b) A current listing of those drugs for which a safe level for extralabel drug use in food-producing animals has been established, the specific safe levels, and the availability, if any, of a...
specific analytical method or methods for drug residue detection will be codified in §530.40.

§530.24 Procedure for announcing analytical methods for drug residue quantification.

(a) FDA may issue an order announcing a specific analytical method or methods for the quantification of extralabel use drug residues above the safe levels established under §530.22 for extralabel use of an approved human drug or an approved animal drug. The agency will publish in the Federal Register a notice of the order, including the name of the specific analytical method or methods and the drug or drugs for which the method is applicable.

(b) Copies of analytical methods for the quantification of extralabel use drug residues above the safe levels established under §530.22 will be available upon request from the Communications and Education Branch (HFV–12), Division of Program Communication and Administrative Management, Center for Veterinary Medicine, 7500 Standish Pl., Rockville, MD 20855. When an analytical method for the detection of extralabel use drug residues above the safe levels established under §530.22 is developed, and that method is acceptable to the agency, FDA will incorporate that method by reference.

§530.25 Orders prohibiting extralabel uses for drugs in food-producing animals.

(a) FDA may issue an order prohibiting extralabel use of an approved new animal or human drug in food-producing animals if the agency finds, after providing an opportunity for public comment, that:

(1) An acceptable analytical method required under §530.22 has not been developed, submitted, and found to be acceptable by FDA or that such method cannot be established; or

(2) The extralabel use in animals presents a risk to the public health.

(b) After making a determination that the analytical method required under §530.22 has not been developed and submitted, or that such method cannot be established, or that an extralabel use in animals of a particular human drug or animal drug presents a risk to the public health, FDA will publish in the Federal Register, with a 90-day delayed effective date, an order of prohibition for an extralabel use of a drug in food-producing animals. Such order shall state that an acceptable analytical method required under §530.22 has not been developed, submitted, and found to be acceptable by FDA; that such method cannot be established; or that the extralabel use in animals presents a risk to the public health; and shall:

(1) Specify the nature and extent of the order of prohibition and the reasons for the prohibition;

(2) Request public comments; and

(3) Provide a period of not less than 60 days for comments.

(c) The order of prohibition will become effective 90 days after date of publication of the order unless FDA publishes a notice in the Federal Register prior to that date, that revokes the order of prohibition, modifies it, or extends the period of public comment.

(d) The agency may publish an order of prohibition with a shorter comment period and/or delayed effective date than specified in paragraph (b) of this section in exceptional circumstances (e.g., where there is immediate risk to the public health), provided that the order of prohibition states that the comment period and/or effective date have been abbreviated because there are exceptional circumstances, and the order of prohibition sets forth the agency’s rationale for taking such action.

(e) If FDA publishes a notice in the Federal Register modifying an order of prohibition, the agency will specify in the modified order of prohibition the nature and extent of the modified prohibition, the reasons for it, and the agency’s response to any comments on the original order of prohibition.

(f) A current listing of drugs prohibited for extralabel use in animals will be codified in §530.41.

(g) After the submission of appropriate information (i.e., adequate data, an acceptable method, approval of a new animal drug application for the prohibited extralabel use, or information demonstrating that the prohibition was based on incorrect data), FDA
may, by publication of an appropriate notice in the \textit{Federal Register}, remove a drug from the list of human and animal drugs prohibited for extralabel use in animals, or may modify a prohibition.

(b) FDA may prohibit extralabel use of a drug in food-producing animals without establishing a safe level.

\textbf{Subpart D—Extralabel Use of Human and Animal Drugs in Animals Not Intended for Human Consumption}

$\S\ 530.30$ \textbf{Extralabel drug use in nonfood animals.}

(a) Because extralabel use of animal and human drugs in nonfood-producing animals does not ordinarily pose a threat to the public health, extralabel use of animal and human drugs is permitted in nonfood-producing animal practice except when the public health is threatened. In addition, the provisions of $\S\ 530.20$ (a)(1) will apply to the use of an approved animal drug.

(b) If FDA determines that an extralabel drug use in animals not intended for human consumption presents a risk to the public health, the agency may publish in the \textit{Federal Register} a notice prohibiting such use following the procedures in $\S\ 530.25$. The prohibited extralabel drug use will be codified in $\S\ 530.41$.

\textbf{Subpart E—Safe Levels for Extralabel Use of Drugs in Animals and Drugs Prohibited From Extralabel Use in Animals}

$\S\ 530.40$ \textbf{Safe levels and availability of analytical methods.}

(a) In accordance with $\S\ 530.22$, the following safe levels for extralabel use of an approved animal drug or human drug have been established: [Reserved]

(b) In accordance with $\S\ 530.22$, the following analytical methods have been accepted by FDA: [Reserved]

$\S\ 530.41$ \textbf{Drugs prohibited for extralabel use in animals.}

(a) The following drugs, families of drugs, and substances are prohibited for extralabel animal and human drug uses in food-producing animals:

(1) Chloramphenicol;
(2) Clenbuterol;
(3) Diethylstilbestrol (DES);
(4) Dimetridazole;
(5) Iproniazide;
(6) Other nitroimidazoles;
(7) Furazolidone.

(b) FDA may prohibit extralabel use of a drug in food-producing animals without establishing a safe level.

(8) Nitrofurazone.

(9) Sulfonamide drugs in lactating dairy cattle (except approved use of sulfadimethoxine, sulfabromomethazine, and sulfaethoxypyridazine);

(10) Fluoroquinolones; and

(11) Glycopeptides.

(12) Phenylbutazone in female dairy cattle 20 months of age or older.

(13) Cephalosporins (not including cephalorin) in cattle, swine, chickens, or turkeys:

(i) For disease prevention purposes;

(ii) At unapproved doses, frequencies, durations, or routes of administration; or

(iii) If the drug is not approved for that species and production class.

(b) The following drugs, families of drugs, and substances are prohibited for extralabel animal and human drug uses in nonfood-producing animals:

(1) Adamantanes.

(2) Neuraminidase inhibitors.

Part 556—Tolerances for Residues of New Animal Drugs in Food

\textbf{Subpart A—General Provisions}

Sec.

556.1 Scope.

556.3 Definitions.
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556.126 Colistimethate.
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556.142 Dihydrostreptomycin.
556.144 Doramectin.
556.146 Efrotomycin.
556.148 Enrofloxacin.
556.149 Eprinomectin.
556.150 Erythromycin.
556.151 Estradiol and related esters.
556.153 Ethopabate.
556.155 Famphur.
556.156 Fenbendazole.
556.157 Fenprostanol.
556.159 Fenthion.
556.166 Florfenicol.
556.168 Flunixin.
556.170 Gamithromycin.
556.172 Gentamicin.
556.174 Gonadotropin.
556.176 Halofuginone.
556.178 Haloxon.
556.180 Hetacillin.
556.182 Hygromycin B.
556.184 Ivermectin.
556.186 Ketoprofen.
556.188 Laidlomycin.
556.190 Lasalocid.
556.192 Lincomycin.
556.194 Levamisole.
556.196 Lincomycin.
556.198 Lubabegron.
556.200 Maduramicin.
556.202 Mefenamic acid.
556.204 Melengestrol.
556.206 Metoxserpate.
556.208 Monensin.
556.210 Morantel.
556.212 Moxidectin.
556.214 Narasin.
556.216 Neomycin.
556.218 Nicarbazin.
556.220 Novobiocin.
556.222 Nystatin.
556.224 Ormetoprim.
556.226 Oxfendazole.
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556.230 Penicillin.
556.232 Pirlimycin.
556.234 Poloxalene.
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556.238 Pyrantel.
556.240 Ractopamine.
556.242 Robenidine.
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556.250 Streptomycin.
556.252 Sulafbrocomethazine.
556.254 Sulfacloraphyrazine.
556.256 Sulfaclorpyridazine.
556.258 Sulroadanthramine.
556.260 Sulfaflame.
556.262 Sulfaalanoxaline.
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556.266 Sulphamethazine.
556.268 Sulfaquinoxaline.
556.270 Sulfaamethoxyprazone.
556.272 Sulfaflame.
556.274 Sulfaethoxypyridazine.
556.276 Sulfaflame.
556.278 Sulfaflame.
556.280 Tetracycline.
556.282 Thiabendazole.
556.284 Tiamulin.
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556.288 Tilmicosin.
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556.294 Tubulamycin.
556.296 Tylosin.
556.298 Tyloforus.
556.300 Virginiamycin.
556.302 Zeranol.
556.304 Zilpaterol.
556.306 Zoalene.


Source: 84 FR 33293, July 11, 2019, unless otherwise noted.

Subpart A—General Provisions

§ 556.1 Scope.

(a) The Federal Food, Drug, and Cosmetic Act requires an applicant seeking approval or conditional approval of a new animal drug to submit a proposed tolerance as part of its new animal drug application when such a tolerance is needed to assure that the proposed use of the new animal drug will be safe (see sections 512(b)(1)(H) and 511(h)(A)(2)(A) of the Federal Food, Drug, and Cosmetic Act). FDA assigns tolerances for animal drugs used in food-producing animals as part of the application approval process. Tolerances for
approved and conditionally approved new animal drugs are codified in subpart B of this part.

(b) Compounds that have been found to be carcinogenic are regulated under subpart E of part 600 of this chapter.

§ 556.3 Definitions.

As used in this part:

Acceptable daily intake (ADI) means the daily intake which, during up to an entire life of a human, appears to be without adverse effects or harm to the health of the consumer. The ADI most often will be set on the basis of the drug’s toxicological, microbiological, or pharmacological properties. It is usually expressed in micrograms or milligrams of the chemical per kilogram of body weight per day.

Acute reference dose (ARfD) means an estimate of the amount of residues expressed on a body weight basis that can be ingested in a period of 24 hours or less without adverse effects or harm to the health of the human consumer.

Edible tissues means muscle, liver, kidney, fat, skin with fat in natural proportions, whole eggs, whole milk, and honey.

Marker residue means the residue whose concentration is in a known relationship to the concentration of total residue in an edible tissue.

mg/kg means milligrams per kilogram.

Not required, in reference to tolerances in this part, means that at the time of approval:

(1) No withdrawal period was necessary for residues of the drug to deplete to or below the concentrations considered to be safe, or an adequate withdrawal period was inherent in the proposed drug use, and there was a rapid depletion of residues, so there was no concern about residues resulting from misuse or overdosing; or

(2) No withdrawal period was necessary because the drug was poorly absorbed or metabolized rapidly so as to make selection of an analyte impractical or impossible.

ppb means parts per billion (equivalent to nanograms per gram (ng/g) or μg/kg).

ppm means parts per million (equivalent to micrograms per gram (μg/g) or mg/kg).

Residue means any compound present in edible tissues that results from the use of a drug, and includes the drug, its metabolites, and any other substance formed in or on food because of the drug’s use.

Target tissue means the edible tissue selected to monitor for residues in the target animals.

Tolerance means the maximum concentration of a marker residue, or other residue indicated for monitoring, that can legally remain in a specific edible tissue of a treated animal.

Total residue means the aggregate of all compounds that results from the use of an animal drug, including the drug, its metabolites, and any other substances formed in or on food because of such drug use.

μg/kg means microgram per kilogram.

Zero, in reference to tolerances in this part, means any residues detected in the edible tissue renders it unsafe.

§ 556.5 General considerations.

(a) The tolerances listed in subpart B of this part pertain only to the species and production classes of the animal for which the drug use has been approved or conditionally approved. Approved and conditionally approved conditions of use in parts 516, 520, 522, 524, 526, 529, and 558 of this chapter, including the species and production classes of animals, are referenced in each tolerance section in subpart B of this part.

(b) All tolerances refer to the concentrations of a marker residue, or other residue indicated for monitoring, permitted in uncooked tissues.

(c) After a tolerance is listed, the finding that the concentration of the marker residue in the target tissue from a tested animal is at or below the tolerance indicates that all edible tissues (excluding milk and eggs unless otherwise indicated) from that tested animal are safe for human consumption. If a listed tolerance is not expressly linked to a target tissue, then the tolerance is specific only for the named edible tissue and inferences cannot be made about the safety of the...
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other edible tissues from the tested animal.

(d) FDA requires that a drug sponsor submit a practicable method as part of their new animal drug application. FDA uses the practicable method to determine the quantity of the drug residues that can safely remain in edible tissues (i.e., the tolerance), the withdrawal period, and any other use restrictions necessary to ensure that the proposed use of the drug will be safe.

Subpart B—Specific Tolerances for Residues of Approved and Conditionally Approved New Animal Drugs

§ 556.34 Albendazole.

(a) Acceptable daily intake (ADI). The ADI for total residue of albendazole is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for albendazole 2-aminosulfone (marker residue) are:

1. Cattle. (i) Liver (target tissue): 0.2 ppm.
2. Sheep. (i) Liver (target tissue): 0.25 ppm.
4. [Reserved]
5. Related conditions of use. See §§ 520.38a and 520.38b of this chapter.

§ 556.36 Altrenerogen.

(a) Acceptable daily intake (ADI). The ADI for total residue of altrenerogen is 0.04 μg/kg of body weight per day.

(b) Tolerances. The tolerances for altrenerogen (marker residue) are:

2. [Reserved]
3. Related conditions of use. See § 520.48 of this chapter.

§ 556.38 Amoxicillin.

(a) [Reserved]

(b) Tolerances. The tolerance for amoxicillin is:

1. Cattle. Edible tissues: 0.01 ppm.
2. [Reserved]

(c) Related conditions of use. See §§ 520.88d, 520.88e, 522.88, and 526.88 of this chapter.

§ 556.40 Ampicillin.

(a) [Reserved]

(b) Tolerances. The tolerances for ampicillin are:

1. Cattle. Edible tissues: 0.01 ppm.
2. Swine. Edible tissues: 0.01 ppm.

(c) Related conditions of use. See §§ 520.90c, 522.90a, and 522.90b of this chapter.

§ 556.50 Amprolium.

(a) [Reserved]

(b) Tolerances. The tolerances for amprolium are:

1. Cattle. (i) Liver, kidney, and muscle: 0.5 ppm.
2. Sheep. (i) Liver (target tissue): 0.25 ppm.
4. [Reserved]
5. Related conditions of use. See §§ 520.100, 558.55, and 558.58 of this chapter.

§ 556.52 Apramycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of apramycin is 25 μg/kg of body weight per day.

(b) Tolerances. The tolerance for apramycin (marker residue) is:

2. [Reserved]
3. Related conditions of use. See §§ 520.110 and 558.59 of this chapter.

§ 556.60 Avilamycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of avilamycin is 1.1 mg/kg of body weight per day.

(b) Tolerances. The tolerances for avilamycin are:

§ 556.68 Azaperone.

(a) Acceptable daily intake (ADI). The ADI for total residue of azaperone is 0.63 μg/kg of body weight per day.

(b) Tolerances. The tolerance for azaperone is:

(1) Swine. Edible tissues: Not required.

(2) [Reserved]

(c) Related conditions of use. See § 558.68 of this chapter.

§ 556.68 Azaperone.

(2) Swine. Edible tissues: Not required.

(c) Related conditions of use. See § 558.68 of this chapter.

§ 556.70 Bacitracin.

(a) Acceptable daily intake (ADI). The ADI for total residue of bacitracin is 0.05 mg/kg of body weight per day.

(b) Tolerances. The tolerances for bacitracin are:

(1) Cattle. Edible tissues: 0.5 ppm.

(2) Chickens, turkeys, pheasants, quail. Edible tissues: 0.5 ppm.

(3) Swine. Edible tissues: 0.5 ppm.

(c) Related conditions of use. See §§ 520.154a, 520.154c, 558.76, and 558.78 of this chapter.

§ 556.75 Bambermycins.

(a) [Reserved]

(b) Tolerances. The tolerances for bambermycins are:

(1) Cattle. Edible tissues (excluding milk): Not required.

(2) Chickens and turkeys. Edible tissues (excluding eggs): Not required.

(3) Swine. Edible tissues: Not required.

(c) Related conditions of use. See §§ 558.95 of this chapter.

§ 556.100 Caradox.

(a) [Reserved]

(b) Tolerances. The tolerance for quinoxaline-2-carboxylic acid (marker residue) is:

(1) Swine. Liver (target tissue): 30 ppm.

(2) [Reserved]

(c) Related conditions of use. See § 558.115 of this chapter.

§ 556.110 Carbomycin.

(a) [Reserved]

(b) Tolerances. The tolerance for carbomycin is:


(2) [Reserved]

(c) Related conditions of use. See § 520.1660a of this chapter.

§ 556.113 Ceftiofur.

(a) Acceptable daily intake and acute reference dose—(1) Acceptable daily intake (ADI). The ADI for total residue of ceftiofur is 30 μg/kg of body weight per day.

(2) Acute reference dose (ARfD). The ARfD for total residue of ceftiofur is 0.830 mg/kg of body weight.

(b) Tolerances. The tolerances for desfuroylceftiofur (marker residue) are:

(1) Cattle. (i) Kidney (target tissue): 0.4 ppm.

(ii) Liver: 2 ppm.

(iii) Muscle: 1 ppm.

(iv) Milk: 0.1 ppm.

(2) Chickens and turkeys. Edible tissues (excluding eggs): Not required.

(3) Goats. (i) Kidney (target tissue): 8 ppm.

(ii) Liver: 2 ppm.

(iii) Muscle: 1 ppm.

(iv) Milk: 0.1 ppm.


(5) Swine. (i) Kidney (target tissue): 0.25 ppm.

(ii) Liver: 3 ppm.

(iii) Muscle: 2 ppm.

(c) Related conditions of use. See §§ 522.313a, 522.313b, 522.313c, and 526.313 of this chapter.

§ 556.115 Cephapirin.

(a) [Reserved]

(b) Tolerances. The tolerances for cephapirin are:

(1) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.

(ii) Milk: 0.02 ppm.

(2) [Reserved]

(c) Related conditions of use. See §§ 526.363 and 526.365 of this chapter.

§ 556.118 Chloramine-T.

(a) Acceptable daily intake (ADI). The ADI for total residue of chloramine-T is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerance for para-toluenesulfonamide (marker residue) is:
(1) Fish. Muscle/skin (target tissue): 0.9 ppm.
(2) [Reserved]
(c) Related conditions of use. See §529.382 of this chapter.

§ 556.120 Chlorhexidine.
(a) [Reserved]
(b) Tolerances. The tolerance for chlorhexidine is:
(2) [Reserved]
(c) Related conditions of use. See §529.400 of this chapter.

§ 556.150 Chlortetracycline.
(a) Acceptable daily intake (ADI). The ADI for total residue of tetracyclines including chlortetracycline, oxytetracycline, and tetracycline is 25 μg/kg of body weight per day.
(b) Tolerances. The tolerances for the sum of tetracycline residues are:
(1) Cattle. (i) Liver: 6 ppm.
(ii) Kidney and fat: 12 ppm.
(iii) Muscle: 2 ppm.
(2) Chickens, turkeys, and ducks. (i) Liver: 6 ppm.
(ii) Kidney and fat: 12 ppm.
(iii) Muscle: 2 ppm.
(iv) Eggs: 0.4 ppm for chlortetracycline only.
(3) Sheep. (i) Liver: 6 ppm.
(ii) Kidney and fat: 12 ppm.
(iii) Muscle: 2 ppm.
(4) Swine. (i) Liver: 6 ppm.
(ii) Kidney and fat: 12 ppm.
(iii) Muscle: 2 ppm.
(c) Related conditions of use. See §§520.441, 520.443, 520.445, 558.128, and 558.140 of this chapter.

§ 556.160 Clopidol.
(a) [Reserved]
(b) Tolerances. The tolerances for clopidol are:
(1) Chickens and turkeys. (i) Liver and kidney: 15 ppm.
(ii) Muscle: 5 ppm.
(2) [Reserved]
(c) Related conditions of use. See §558.175 of this chapter.

§ 556.163 Clorsulon.
(a) Acceptable daily intake (ADI). The ADI for total residue of clorsulon is 8 μg/kg of body weight per day.
(b) Tolerances. The tolerances for clorsulon (marker residue) are:
(1) Cattle. (i) Kidney (target tissue): 1.0 ppm.
(ii) Muscle: 0.1 ppm.
(2) [Reserved]
(c) Related conditions of use. See §§520.462 and 522.1193 of this chapter.

§ 556.165 Cloxacillin.
(a) [Reserved]
(b) Tolerances. The tolerance for cloxacillin is:
(1) Cattle. Edible tissues: 0.01 ppm.
(2) [Reserved]
(c) Related conditions of use. See §§526.464 and 526.465 of this chapter.

[86 FR 14821, Mar. 19, 2021]

§ 556.167 Colistimethate.
(a) [Reserved]
(b) Tolerances. The tolerance for colistimethate is:
(1) Chickens. Edible tissues (excluding eggs): Not required.
(2) [Reserved]
(c) Related conditions of use. See §522.468 of this chapter.

§ 556.168 Coumaphos.
(a) [Reserved]
(b) Tolerances. The tolerances for coumaphos (measured as coumaphos and its oxygen analog, O,O-diethyl O-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphate) are:
(1) Chickens. (i) Edible tissues (excluding eggs): 1 ppm.
(ii) Eggs: 0.1 ppm.
(2) [Reserved]
(c) Related conditions of use. See §558.185 of this chapter.
[86 FR 14821, Mar. 19, 2021]

§ 556.169 Danofloxacin.
(a) Acceptable daily intake (ADI). The ADI for total residue of danofloxacin is 2.4 μg/kg of body weight per day.
(b) Tolerances. The tolerances for danofloxacin (marker residue) are:
(1) Cattle. (i) Liver (target tissue): 0.2 ppm.
(ii) Muscle: 0.2 ppm.
(2) [Reserved]
(c) Related conditions of use. See §522.522 of this chapter.
§ 556.170 Decoquinate.

(a) Acceptable daily intake (ADI). The ADI for total residue of decoquinate is 75 μg/kg of body weight per day.
(b) Tolerances. The tolerances for decoquinate are:
   (1) Cattle. (i) Muscle: 1 ppm.
   (ii) Other edible tissues (excluding milk): 2 ppm.
   (2) Chickens. (i) Muscle: 1 ppm.
   (ii) Other edible tissues (excluding eggs): 2 ppm.
   (3) Goats. (i) Muscle: 1 ppm.
   (ii) Other edible tissues (excluding milk): 2 ppm.
(c) Related conditions of use. See §§ 520.534 and 558.195 of this chapter.

§ 556.180 Dichlorvos.

(a) [Reserved]
(b) Tolerances. The tolerance for dichlorvos is:
   (1) Swine. Edible tissues: 0.1 ppm.
   (2) [Reserved]
(c) Related conditions of use. See §§ 558.205 of this chapter.

§ 556.185 Diclazuril.

(a) Acceptable daily intake (ADI). The ADI for total residue of diclazuril is 25 μg/kg of body weight per day.
(b) Tolerances. The tolerances for diclazuril are:
   (1) Chickens and turkeys. (i) Liver: 3 ppm.
   (ii) Muscle: 0.5 ppm.
   (iii) Skin/fat: 1 ppm.
   (2) [Reserved]
(c) Related conditions of use. See § 558.205 of this chapter.

§ 556.200 Dihydrostreptomycin.

(a) [Reserved]
(b) Tolerances. The tolerances for dihydrostreptomycin are:
   (1) Cattle. (i) Kidney: 2.0 ppm.
   (ii) Other edible tissues (excluding milk): 0.5 ppm.
   (iii) Milk: 0.125 ppm.
   (2) Swine. (i) Kidney: 2.0 ppm.
   (ii) Other edible tissues: 0.5 ppm.
(c) Related conditions of use. See §§ 522.650, 526.1696b, and 526.1696c of this chapter.

§ 556.222 Doramectin.

(a) Acceptable daily intake (ADI). The ADI for total residue of doramectin is 0.75 μg/kg of body weight per day.
(b) Tolerances. The tolerances for doramectin (marker residue) are:
   (1) Cattle. (i) Liver (target tissue): 300 ppb.
   (ii) Muscle: 30 ppb.
   (2) Swine. Liver (target tissue): 160 ppb.
(c) Related conditions of use. See §§ 522.770, 522.772, and 524.770 of this chapter.

§ 556.224 Efrotomycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of efrotomycin is 10 μg/kg of body weight per day.
(b) Tolerances. The tolerance for efrotomycin is:
   (1) Swine. Edible tissues: Not required.
   (2) [Reserved]
(c) Related conditions of use. See § 558.235 of this chapter.

§ 556.226 Enrofloxacin.

(a) Acceptable daily intake (ADI). The ADI for total residue of enrofloxacin is 3 μg/kg of body weight per day.
(b) Tolerances. The tolerances for enrofloxacin are:
   (1) Cattle. Liver (target tissue): 0.1 ppm desethylene ciprofloxacin (marker residue).
   (2) Swine. Liver (target tissue): 0.5 ppm enrofloxacin (marker residue).
(c) Related conditions of use. See §§ 516.812 and 522.812 of this chapter.

§ 556.227 Eprinomectin.

(a) Acceptable daily intake (ADI). The ADI for total residue of eprinomectin is 10 μg/kg of body weight per day.
(b) Tolerances. The tolerances for eprinomectin B1a (marker residue) are:
   (1) Cattle. (i) Liver (target tissue): 1.5 ppm.
   (ii) Muscle: 100 ppb.
(iii) Milk: 12 ppb.

(2) [Reserved]

(c) Related conditions of use. See §§522.814 and 524.814 of this chapter.

§ 556.230 Erythromycin.

(a) [Reserved]

(b) Tolerances. The tolerances for erythromycin are:

(1) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.

(ii) Milk: Zero.

(2) Chickens and turkeys. (i) Edible tissues (excluding eggs): 0.125 ppm.

(ii) Eggs: 0.025 ppm.

(c) Related conditions of use. See §§520.814 and 524.814 of this chapter.

§ 556.240 Estradiol and related esters.

(a) [Reserved]

(b) Residues. Residues of estradiol are not permitted in excess of the following increments above the concentrations of estradiol naturally present in untreated animals:

(1) Cattle. (i) Muscle: 0.2 ppb.

(ii) Liver: 0.6 ppb.

(iii) Kidney: 1.2 ppb.

(iv) Fat: 1.2 ppb.

(2) [Reserved]

(c) Related conditions of use. See §§522.840, 522.850, 522.1940, 522.2343, 522.2477, and 522.2478 of this chapter.

§ 556.250 Ethopabate.

(a) [Reserved]

(b) Tolerances. The tolerances for ethopabate, measured as metaphenetidine, are:

(1) Chickens. (i) Liver: 1.5 ppm.

(ii) Kidney: 1.5 ppm.

(iii) Muscle: 0.5 ppm.

(2) [Reserved]

(c) Related conditions of use. See §558.38 of this chapter.

§ 556.270 Fenthion.

(a) [Reserved]

(b) Tolerances. The tolerance for fenthion including its oxygen analog is:

(1) Cattle. Edible tissues (excluding milk): 0.1 ppm.

(2) [Reserved]

(c) Related conditions of use. See §§520.1242g, 524.900, and 558.254 of this chapter.

§ 556.275 Fenbendazole.

(a) Acceptable daily intake (ADI). The ADI for total residue of fenbendazole is 40 μg/kg of body weight per day.

(b) Tolerances. The tolerances for fenbendazole are:

(1) Cattle. (i) Liver (target tissue): 0.8 ppm fenbendazole (marker residue).

(ii) Milk: 0.22 ppm fenbendazole sulfoxide (marker residue).

(2) Chickens. (i) Liver (target tissue): 5.2 ppm fenbendazole sulfone (marker residue).

(ii) Eggs: 1.8 ppm fenbendazole sulfone (marker residue).

(3) Goats. (i) Liver (target tissue): 0.8 ppm fenbendazole (marker residue).

(ii) [Reserved]

(4) Swine. (i) Liver (target tissue): 3.2 ppm fenbendazole (marker residue).

(ii) [Reserved]

(5) Turkeys. (i) Liver (target tissue): 6 ppm fenbendazole sulfone (marker residue).

(ii) [Reserved]

(c) Related conditions of use. See §§520.905a, 520.905b, 520.905c, 520.905d, and 558.258 of this chapter.

§ 556.277 Fenprostalene.

(a) Acceptable daily intake (ADI). The ADI for total residue of fenprostalene is 0.08 μg/kg of body weight per day.

(b) Tolerances. The tolerances for fenprostalene are:

(1) Cattle. Edible tissues (excluding milk): Not required.

(2) Swine. Edible tissues: Not required.

(c) Related conditions of use. See §522.914 of this chapter.

§ 556.280 Fenthion.

(a) [Reserved]

(b) Tolerances. The tolerance for fenthion is:

(1) Cattle. Edible tissues (excluding milk): 0.1 ppm.

(2) [Reserved]

(c) Related conditions of use. See §524.920 of this chapter.
§ 556.283 Florfenicol.

(a) Acceptable daily intake (ADI). The ADI for total residue of florfenicol is 10 μg/kg of body weight per day.

(b) Tolerances. The tolerances for florfenicol amine (marker residue) are:
   (1) Cattle. (i) Liver (target tissue): 2.5 ppm.
   (ii) Muscle: 0.3 ppm.
   (2) Swine. (i) Liver (target tissue): 3.7 ppm.
   (ii) Muscle: 0.3 ppm.
   (3) Catfish. Muscle (target tissue): 0.1 ppm.
   (4) Freshwater-reared warmwater finfish (other than catfish) and salmonids. Muscle/skin (target tissue): 1 ppm.

(c) Related conditions of use. See §§ 520.955, 522.955, 522.956, and 558.261 of this chapter.

§ 556.286 Flunixin.

(a) Acceptable daily intake (ADI). The ADI for total residue of flunixin is 0.72 μg/kg of body weight per day.

(b) Tolerances. The tolerances for flunixin are:
   (1) Cattle. (i) Liver (target tissue): 125 ppb flunixin free acid (marker residue).
   (ii) Muscle: 25 ppb flunixin free acid.
   (iii) Milk: 2 ppb 5-hydroxy flunixin (marker residue).
   (2) Swine. (i) Liver (target tissue): 30 ppb flunixin free acid (marker residue).
   (ii) Muscle: 25 ppb flunixin free acid.
   (c) Related conditions of use. See §§ 522.956, 522.1044, and 522.1044c of this chapter.

§ 556.292 Gamithromycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of gamithromycin is 10 μg/kg of body weight per day.

(b) Tolerances. The tolerances for gamithromycin (marker residue) are:
   (1) Cattle. (i) Liver (target tissue): 500 ppb.
   (ii) Muscle: 150 ppb.
   (2) [Reserved]
   (c) Related conditions of use. See §522.1014 of this chapter.

§ 556.300 Gentamicin.

(a) Acceptable daily intake (ADI). The ADI for total residue of gentamicin is 60 μg/kg of body weight per day.

(b) Tolerances. The tolerances for gentamicin are:
   (1) Chickens and turkeys. Edible tissues (excluding eggs): 0.1 ppm.
   (2) Swine. (i) Liver: 0.3 ppm.
   (ii) Kidney (target tissue): 0.4 ppm.
   (iii) Fat: 0.4 ppm.
   (iv) Muscle: 0.1 ppm.
   (c) Related conditions of use. See §§ 520.1044a, 520.1044b, 520.1044c, 522.1044, 524.1044e, and 529.1044b of this chapter.

§ 556.304 Gonadotropin.

(a) Acceptable daily intake (ADI). The ADI for residues of total gonadotropins (human chorionic gonadotropin and pregnant mare serum gonadotropin) is 42.25 International Units per kilogram of body weight per day.

(b) Tolerances. The tolerances for gonadotropin are:
   (1) Cattle. Edible tissues (excluding milk): Not required.
   (2) Fish. Edible tissues: Not required.
   (3) Swine. Edible tissues: Not required.
   (c) Related conditions of use. See §§ 522.1079 and 522.1081 of this chapter.

§ 556.308 Halofuginone.

(a) Acceptable daily intake (ADI). The ADI for total residue of halofuginone hydrobromide is 0.7 μg/kg of body weight per day.

(b) Tolerances. The tolerances for halofuginone (marker residue) are:
   (1) Chickens. Liver (target tissue): 0.16 ppm.
   (2) Turkeys. Liver (target tissue): 0.13 ppm.
   (c) Related conditions of use. See §558.265 of this chapter.

§ 556.310 Haloxon.

(a) [Reserved]

(b) Tolerances. The tolerance for haloxon is:
   (1) Cattle. Edible tissues (excluding milk): 0.16 ppm.
   (2) [Reserved]
   (c) Related conditions of use. See §§520.1120a and 520.1120b of this chapter.

§ 556.316 Hetacillin.

(a) [Reserved]
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§ 556.360 Lincomycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of lincomycin is 25 μg/kg of body weight per day.

(b) Tolerances. The tolerances for lincomycin (marker residue) are:
   (1) Chickens. Edible tissues (excluding eggs): Not required.
   (2) Swine. (i) Liver: 0.6 ppm.
      (ii) Muscle: 0.1 ppm.
   (3) Honey. 750 ppb.

§ 556.346 Laidlomycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of laidlomycin is 7.5 μg/kg of body weight per day.

(b) Tolerances. The tolerance for laidlomycin (marker residue) is:
   (1) Cattle. Liver (target tissue): 0.2 ppm.
   (2) [Reserved]
   (c) Related conditions of use. See §558.305 of this chapter.

§ 556.347 Lasalocid.

(a) Acceptable daily intake (ADI). The ADI for total residue of lasalocid is 10 μg/kg of body weight per day.

(b) Tolerances. The tolerances for lasalocid (marker residue) are:
   (1) Cattle. Liver (target tissue): 0.7 ppm.
   (2) Chickens. (i) Skin with adhering fat (target tissue): 0.4 ppm.
      (ii) Liver: 0.4 ppm.
   (3) Rabbits. Liver (target tissue): 0.7 ppm.
   (4) Sheep. Liver (target tissue): 1.0 ppm.
   (5) Turkeys. (i) Liver (target tissue): 0.4 ppm.
      (ii) Skin with adhering fat: 0.4 ppm.
   (c) Related conditions of use. See §558.311 of this chapter.

§ 556.350 Levamisole.

(a) [Reserved]

(b) Tolerances. The tolerances for levamisole are:
   (1) Cattle. Edible tissues (excluding milk): 0.1 ppm.
   (2) Sheep. Edible tissues (excluding milk): 0.1 ppm.
   (3) Swine. Edible tissues: 0.1 ppm.
   (c) Related conditions of use. See §§520.1242a, 520.1242b, 520.1242c, 520.1242d, 520.1242e, 520.1242f, 522.1242b, 522.1242c, 522.1242d, and 524.1240 of this chapter.

§ 556.345 Ketoprofen.

(a) Acceptable daily intake (ADI). The ADI for total residue of ketoprofen is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for ketoprofen (marker residue) are:
   (1) Cattle. (i) Kidney (target tissue): 0.36 ppm.
      (ii) [Reserved]
   (c) Related conditions of use. See §§522.1225 and 522.2632 of this chapter.

§ 556.330 Hygromycin B.

(a) [Reserved]

(b) Tolerances. The tolerances for hygromycin B are:
   (2) Swine. Edible tissues: Zero.
   (c) Related conditions of use. See §558.274 of this chapter.

§ 556.344 Ivermectin.

(a) Acceptable daily intake (ADI). The ADI for total residue of ivermectin is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for 22,23-dihydroavermectin B1a (marker residue) are:
   (2) Cattle. (i) Liver (target tissue): 1.6 ppm.
      (ii) Muscle: 650 ppb.
   (3) Reindeer. Liver (target tissue): 15 ppb.
   (4) Sheep. Liver (target tissue): 30 ppb.
   (5) Swine. (i) Liver (target tissue): 20 ppb.
      (ii) Muscle: 20 ppb.
   (c) Related conditions of use. See §§520.1192, 520.1195, 520.1197, 522.1192, 522.1193, 524.1193, and 558.300 of this chapter.

§ 556.340 Lincomycin.

(b) Tolerances. The tolerances for ampicillin (marker residue for hetacillin) are:
   (1) Cattle. Edible tissues: 0.01 ppm.
   (2) [Reserved]
   (c) Related conditions of use. See §526.1130 of this chapter.

[84 FR 5311, Oct. 7, 2019]

§ 556.330 Hygromycin B.

(a) [Reserved]

(b) Tolerances. The tolerances for hygromycin B are:
   (2) Swine. Edible tissues: Zero.
   (c) Related conditions of use. See §558.274 of this chapter.

§ 556.344 Ivermectin.

(a) Acceptable daily intake (ADI). The ADI for total residue of ivermectin is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for 22,23-dihydroavermectin B1a (marker residue) are:
   (2) Cattle. (i) Liver (target tissue): 1.6 ppm.
      (ii) Muscle: 650 ppb.
   (3) Reindeer. Liver (target tissue): 15 ppb.
   (4) Sheep. Liver (target tissue): 30 ppb.
   (5) Swine. (i) Liver (target tissue): 20 ppb.
      (ii) Muscle: 20 ppb.
   (c) Related conditions of use. See §§520.1192, 520.1195, 520.1197, 522.1192, 522.1193, 524.1193, and 558.300 of this chapter.

[84 FR 32993, July 11, 2019, as amended at 85 FR 18121, Apr. 1, 2020]

§ 556.345 Ketoprofen.

(a) Acceptable daily intake (ADI). The ADI for total residue of ketoprofen is 5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for ketoprofen (marker residue) are:
   (1) Cattle. (i) Kidney (target tissue): 0.36 ppm.
      (ii) [Reserved]
   (c) Related conditions of use. See §§522.1225 and 522.2632 of this chapter.

[86 FR 61868, Nov. 8, 2021]
§ 556.370 Lubabegron.

(a) Acceptable daily intake (ADI). The ADI for total residues of lubabegron is 3 micrograms per kilogram of body weight per day.

(b) Tolerances. The tolerances for lubabegron (marker residue) are:

(1) Cattle. (i) Liver (target tissue): 10 ppb.  
   (ii) Muscle: 3 ppb.  
   (iii) Kidney: 20 ppb.

(2) [Reserved]

(c) Related conditions of use. See §§ 558.330 of this chapter.

[84 FR 12494, Apr. 2, 2019, as amended at 87 FR 17947, Mar. 29, 2022]

§ 556.375 Maduramicin.

(a) [Reserved]

(b) Tolerances. The tolerance for maduramicin (marker residue) is:

(1) Chickens. Fat (target tissue): 0.38 ppm.

(2) [Reserved]

(c) Related conditions of use. See § 558.340 of this chapter.

[84 FR 12494, Apr. 2, 2019, as amended at 87 FR 17947, Mar. 29, 2022]

§ 556.380 Melengestrol.

(a) [Reserved]

(b) Tolerances. The tolerance for melengestrol is:

(1) Cattle. Fat: 25 ppb.

(2) [Reserved]

(c) Related conditions of use. See § 558.342 of this chapter.

§ 556.410 Metoserpate.

(a) [Reserved]

(b) Tolerances. The tolerance for metoserpate is:

(1) Chickens. Edible tissues (excluding eggs): 0.02 ppm.

(2) [Reserved]

(c) Related conditions of use. See § 520.1422 of this chapter.

§ 556.420 Monensin.

(a) Acceptable daily intake (ADI). The ADI for total residue of monensin is 12.5 μg/kg of body weight per day.

(b) Tolerances. The tolerances for monensin are:

(1) Cattle. (i) Liver: 0.10 ppm.  
   (ii) Muscle, kidney, and fat: 0.05 ppm.  
   (iii) Milk: Not required.

(2) Chickens and turkeys. Edible tissues (excluding eggs): Not required.

(3) Goats. Edible tissues (excluding milk): 0.05 ppm.

(4) Quail. Edible tissues (excluding eggs): Not required.

(c) Related conditions of use. See §§ 558.355 of this chapter.

§ 556.425 Morantel.

(a) Acceptable daily intake (ADI). The ADI for total residue of morantel tartrate is 10 μg/kg of body weight per day.

(b) Tolerances. The tolerances for N-methyl-1,3-propanediamine (marker residue) are:

(1) Cattle. (i) Liver (target tissue): 0.7 ppm.  
   (ii) Milk: Not required.

(2) Goats. (i) Liver (target tissue): 0.7 ppm.  
   (ii) Milk: Not required.

(c) Related conditions of use. See §§ 520.1450a, 520.1450b, 520.1450c, and 558.360 of this chapter.

§ 556.426 Moxidectin.

(a) Acceptable daily intake (ADI). The ADI for total residue of moxidectin is 4 μg/kg of body weight per day.

(b) Tolerances. The tolerances for moxidectin (marker residue) are:

(1) Cattle. (i) Fat (target tissue): 900 ppb.  
   (ii) Liver: 200 ppb.  
   (iii) Muscle: 50 ppb.  
   (iv) Milk: 40 ppb.

(2) Sheep. (i) Fat (target tissue): 900 ppb.  
   (ii) Liver: 200 ppb.  
   (iii) Muscle: 50 ppb.

(c) Related conditions of use. See §§ 520.1454, 522.1450, and 524.1450 of this chapter.

§ 556.428 Narasin.

(a) Acceptable daily intake (ADI). The ADI for total residue of narasin is 5 μg/kg of body weight per day.
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§ 556.430 Neomycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of neomycin is 6 μg/kg of body weight per day.

(b) Tolerances. The tolerances for neomycin are:

   (ii) Liver: 3.6 ppm.
   (iii) Muscle: 1.2 ppm.
   (iv) Fat: 7.2 ppm.
   (v) Milk: 0.15 ppm.
   (ii) Liver: 3.6 ppm.
   (iii) Muscle: 1.2 ppm.
   (iv) Fat: 7.2 ppm.

(c) Related conditions of use. See §§ 558.363 and 558.364 of this chapter.

§ 556.445 Nicarbazin.

(a) Acceptable daily intake (ADI). The ADI for total residues of nicarbazin (4,4′-dinitrocarbanilide and 2-hydroxy-4,6-dimethylpyrimidine) is 200 μg/kg of body weight per day.

(b) Tolerances. The tolerance for nicarbazin (marker residue) is:


(c) Related conditions of use. See §§ 558.364 and 558.365 of this chapter.

§ 556.460 Novobiocin.

(a) [Reserved]

(b) Tolerances. The tolerances for novobiocin are:

1. Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.
   (ii) Milk: 0.1 ppm.

(c) Related conditions of use. See §§ 558.364 and 558.365 of this chapter.

§ 556.495 Oxfendazole.

(a) Acceptable daily intake (ADI). The ADI for total residue of oxfendazole is 7 μg/kg of body weight per day.

(b) Tolerances. The tolerance for oxfendazole (marker residue) is:

1. Cattle. Liver (target tissue): 0.8 ppm.

(c) Related conditions of use. See §§ 558.1484, 524.1600b, and 558.365 of this chapter.

§ 556.500 Oxytetracycline.

(a) Acceptable daily intake (ADI). The ADI for total tetracycline residues (chlortetracycline, oxytetracycline, and tetracycline) is 25 μg/kg of body weight per day.

(b) Tolerances. The tolerances for the sum of tetracycline residues are:

   (ii) Liver: 6 ppm.
   (iii) Fat and kidney: 12 ppm.
   (iv) Milk: 0.3 ppm.
   (ii) Liver: 6 ppm.
   (iii) Fat and kidney: 12 ppm.
§ 556.510 Penicillin.

(a) [Reserved]

(b) Tolerances. The tolerances for penicillin are:

(1) Cattle. (i) Edible tissues (excluding milk): 0.05 ppm.
(ii) Milk: Zero.
(5) Turkeys. Edible tissues (excluding eggs): 0.01 ppm.

(c) Related conditions of use. See §§ 520.1660a, 520.1660c, 520.1660d, 522.1660a, 522.1660b, 522.1662, 522.1664, 529.1660, 558.450, and 558.455 of this chapter.

§ 556.515 Pirlimycin.

(a) Acceptable daily intake (ADI). The ADI for total residue of pirlimycin is 0.01 mg/kg of body weight per day.

(b) Tolerances. The tolerances for pirlimycin (marker residue) are:

(1) Cattle. (i) Liver (target tissue): 0.5 ppm.
(5) Turkeys. Edible tissues (excluding eggs): 0.01 ppm.

(c) Related conditions of use. See §§ 520.1696a, 520.1696c, 520.1696d, 520.1696e, 520.1696f, 520.1697, and 520.1698 of this chapter.

§ 556.517 Poloxalene.

(a) [Reserved]

(b) Tolerances. The tolerance for poloxalene is:

(1) Cattle. Edible tissues (excluding milk): Not required.
(2) [Reserved]

(c) Related conditions of use. See §§ 520.1840 and 558.464 of this chapter.

§ 556.540 Progesterone.

(a) [Reserved]

(b) Residues. Residues of progesterone are not permitted in excess of the following increments above the concentrations of progesterone naturally present in untreated animals:

(1) Cattle and sheep. (i) Muscle: 5 ppb.
(ii) Liver: 15 ppb.
(iii) Kidney: 30 ppb.
(iv) Fat: 30 ppb.
(2) [Reserved]

(c) Related conditions of use. See §§ 522.1940 and 529.1940 of this chapter.

§ 556.560 Pyrantel.

(a) [Reserved]

(b) Tolerances. The tolerances for pyrantel are:

(1) Swine. (i) Liver and kidney: 10 ppm.
(ii) Muscle: 1 ppm.
(2) [Reserved]

(c) Related conditions of use. See §§ 520.2045 and 558.485 of this chapter.

§ 556.570 Ractopamine.

(a) Acceptable daily intake (ADI). The ADI for total residue of ractopamine hydrochloride is 1.25 μg/kg of body weight per day.

(b) Tolerances. The tolerances for ractopamine (marker residue) are:

(1) Cattle. (i) Liver (target tissue): 0.09 ppm.
(ii) Muscle: 0.03 ppm.
(2) Swine. (i) Liver (target tissue): 0.15 ppm.
(ii) Muscle: 0.05 ppm.
(3) Turkeys. (i) Liver (target tissue): 0.45 ppm.
(ii) Muscle: 0.1 ppm.

(c) Related conditions of use. See §§ 520.2045 and 558.485 of this chapter.

§ 556.580 Robenidine.

(a) [Reserved]

(b) Tolerances. The tolerances for robenidine are:

(1) Chickens. (i) Skin and fat: 0.2 ppm.
(ii) Other edible tissues (excluding eggs): 0.1 ppm.
(2) [Reserved]
§ 556.592 Salinomycin.
(a) Acceptable daily intake (ADI). The ADI for total residue of salinomycin is 5 μg/kg of body weight per day.
(b) Tolerances. The tolerances for salinomycin are:
(1) Chickens. Edible tissues (excluding eggs): Not required.
(2) Quail. Edible tissues (excluding eggs): Not required.
(c) Related conditions of use. See § 558.515 of this chapter.

§ 556.597 Semduramicin.
(a) Acceptable daily intake (ADI). The ADI for total residue of semduramicin is 3 μg/kg of body weight per day.
(b) Tolerances. The tolerances for semduramicin are:
(1) Chickens. (i) Liver: 400 ppb.
(ii) Muscle: 130 ppb.
(2) [Reserved]
(c) Related conditions of use. See § 558.550 of this chapter.

§ 556.600 Spectinomycin.
(a) Acceptable daily intake (ADI). The ADI for total residue of spectinomycin is 25 μg/kg of body weight per day.
(b) Tolerances. The tolerances for spectinomycin are:
(1) Cattle. (i) Kidney (target tissue): 4 ppm spectinomycin (marker residue).
(ii) Muscle: 0.25 ppm.
(2) Chickens and turkeys. Edible tissues (excluding eggs): 0.1 ppm.
(3) Swine. Edible tissues: Not required.
(c) Related conditions of use. See §§ 520.1265, 520.2123b, 520.2123c, 522.2120, and 522.2121 of this chapter.

§ 556.610 Streptomycin.
(a) [Reserved]
(b) Tolerances. The tolerances for streptomycin are:
(1) Cattle and swine. (i) Kidney: 2.0 ppm.
(ii) Other edible tissues (excluding milk): 0.5 ppm.
(2) Chickens. (i) Kidney: 2.0 ppm.
(ii) Other edible tissues (excluding eggs): 0.5 ppm.
(c) Related conditions of use. See §520.2158 of this chapter.

§ 556.620 Sulfabromomethazine.
(a) [Reserved]
(b) Tolerances. The tolerances for sulfabromomethazine are:
(1) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.
(ii) Milk: 0.01 ppm.
(2) [Reserved]
(c) Related conditions of use. See § 520.2170 of this chapter.

§ 556.625 Sulfachloropyrazine.
(a) [Reserved]
(b) Tolerances. The tolerance for sulfachloropyrazine is:
(2) [Reserved]
(c) Related conditions of use. See § 520.2184 of this chapter.

§ 556.630 Sulfachloropyridazine.
(a) [Reserved]
(b) Tolerances. The tolerances for sulfachloropyridazine are:
(1) Cattle and swine. Edible tissues (excluding eggs): 0.1 ppm.
(2) [Reserved]
(c) Related conditions of use. See §§ 520.2200 and 522.2200 of this chapter.

§ 556.640 Sulfadimethoxine.
(a) [Reserved]
(b) Tolerances. The tolerances for sulfadimethoxine are:
(1) Catfish and salmonids. Edible tissues: 0.1 ppm.
(2) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.
(ii) Milk: 0.01 ppm.
(3) Chickens, turkeys, ducks, and chukar partridges. Edible tissues (excluding eggs): 0.1 ppm.
(c) Related conditions of use. See §§ 520.2220a, 520.2220b, 520.2220c, 522.2220, and 558.575 of this chapter.

§ 556.650 Sulfathiazole.
(a) [Reserved]
(b) Tolerances. The tolerances for sulfathiazole are:
(1) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.
(ii) Milk: Zero.
(2) Swine. Edible tissues: Zero.
(c) Related conditions of use. See §§ 520.2240a, 520.2240b, and 522.2240 of this chapter.
§ 556.660 Sulfamerazine.

(a) [Reserved]

(b) Tolerances. The tolerance for sulfamerazine is:


(2) [Reserved]

(c) Related conditions of use. See §§ 520.2218 and 558.582 of this chapter.

[84 FR 32993, July 11, 2019, as amended at 85 FR 18121, Apr. 1, 2020]

§ 556.670 Sulfamethazine.

(a) [Reserved]

(b) Tolerances. The tolerances for sulfamethazine are:

(1) Cattle. Edible tissues (excluding milk): 0.1 ppm.

(2) Chickens and turkeys. Edible tissues (excluding eggs): 0.1 ppm.

(3) Swine. Edible tissues: 0.1 ppm.

(c) Related conditions of use. See §§ 520.445, 520.2218, 520.2260a, 520.2260b, 520.2261a, 520.2261b, 522.2260, 558.140, and 558.630 of this chapter.

[84 FR 32993, July 11, 2019, as amended at 85 FR 18121, Apr. 1, 2020; 86 FR 13188, Mar. 8, 2021]

§ 556.685 Sulfaquinoxaline.

(a) [Reserved]

(b) Tolerances. The tolerances for sulfaquinoxaline are:

(1) Cattle. Edible tissues (excluding milk): 0.1 ppm.

(2) Chickens and turkeys. Edible tissues (excluding eggs): 0.1 ppm.

(c) Related conditions of use. See §§ 520.2345c and 520.2345d of this chapter.

[84 FR 32993, July 11, 2019, as amended at 85 FR 18121, Apr. 1, 2020; 86 FR 13188, Mar. 8, 2021]

§ 556.700 Sulfomyxin.

(a) [Reserved]

(b) Tolerances. The tolerances for sulfomyxin are:


(2) [Reserved]

(c) Related conditions of use. See § 522.2340 of this chapter.

[84 FR 32993, July 11, 2019, as amended at 85 FR 18121, Apr. 1, 2020]

§ 556.710 Testosterone.

(a) [Reserved]

(b) Residues. Residues of testosterone are not permitted in excess of the following increments above the concentrations of testosterone naturally present in untreated animals:

(1) Cattle. (i) Fat: 2.6 ppb.

(ii) Kidney: 1.9 ppb.

(iii) Liver: 1.3 ppb.

(iv) Muscle: 0.64 ppb.

(2) [Reserved]

(c) Related conditions of use. See § 522.2343 of this chapter.

[84 FR 32993, July 11, 2019, as amended at 87 FR 10970, Feb. 28, 2022]

§ 556.720 Tetracycline.

(a) Acceptable daily intake (ADI). The ADI for total tetracycline residues (chlortetracycline, oxytetracycline, and tetracycline) is 25 μg/kg of body weight per day.

(b) Tolerances. The tolerances for the sum of tetracycline residues are:

(1) Cattle and sheep. (i) Kidney and fat: 12 ppb.

(ii) Liver: 6 ppb.

(iii) Muscle: 2 ppb.

(2) Chickens and turkeys. (i) Kidney and fat: 12 ppb.

(ii) Liver: 6 ppb.

(iii) Muscle: 2 ppb.

(3) Swine. (i) Kidney and fat: 12 ppb.

(ii) Liver: 6 ppb.

(iii) Muscle: 2 ppb.

(c) Related conditions of use. See §§ 520.2345c and 520.2345d of this chapter.

[84 FR 32993, July 11, 2019, as amended at 87 FR 10970, Feb. 28, 2022]

§ 556.730 Thiabendazole.

(a) [Reserved]

(b) Tolerances. The tolerances for thiabendazole are:

(1) Cattle. (i) Edible tissues (excluding milk): 0.1 ppm.

(ii) Milk: 0.05 ppm.

(2) Swine. Edible tissues: 0.1 ppm.

(3) Sheep and goats. (i) Edible tissues (excluding milk): 0.1 ppm.

(ii) Milk: 0.05 ppm.

(4) Pheasants. Edible tissues (excluding eggs): 0.1 ppm.

(c) Related conditions of use. See §§ 520.2380a, 520.2380b, 520.2380c, and 508.600 of this chapter.

§ 556.732 Tiamulin.

(a) Acceptable daily intake (ADI). The ADI for total residue of tiamulin is 25 μg/kg of body weight per day.

(b) Tolerances. The tolerance for 8-alpha-hydroxymutilin (marker residue) is:
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§ 556.733 Tildipirosin.
(a) Acceptable daily intake (ADI). The ADI for total residue of tildipirosin is 50 μg/kg of body weight per day.
(b) Tolerances. The tolerance for tildipirosin (the marker residue) is:
   (1) Cattle. (i) Liver (the target tissue): 10 ppm.
   (ii) [Reserved]
   (2) [Reserved]
   (c) Related conditions of use. See §§ 520.2455 and 558.612 of this chapter.

§ 556.735 Tilmicosin.
(a) Acceptable daily intake (ADI). The ADI for total residue of tilmicosin is 25 μg/kg of body weight per day.
(b) Tolerances. The tolerances for tilmicosin (marker residue) are:
   (1) Cattle. (i) Liver (target tissue): 1.2 ppm.
   (ii) Muscle: 0.1 ppm.
   (2) Sheep. (i) Liver (target tissue): 1.2 ppm.
   (ii) Muscle: 0.1 ppm.
   (3) Swine. (i) Liver (target tissue): 7.5 ppm.
   (ii) Muscle: 0.1 ppm.
   (c) Related conditions of use. See §§ 522.2460 of this chapter.

§ 556.739 Trenbolone.
(a) Acceptable daily intake (ADI). The ADI for total residue of trenbolone is 0.4 μg/kg of body weight per day.
(b) Tolerances. The tolerance for trenbolone is:
   (1) Cattle. Edible tissues (excluding milk): Not required.
   (2) [Reserved]
   (c) Related conditions of use. See §§ 522.2471, 522.2471, and 558.618 of this chapter.

§ 556.741 Tripelennamine.
(a) [Reserved]
(b) Tolerances. The tolerances for tripelennamine are:
   (ii) Milk: 20 ppb.
   (2) [Reserved]
   (c) Related conditions of use. See § 522.2615 of this chapter.

§ 556.745 Tulathromycin.
(a) Acceptable daily intake (ADI). The ADI for total residue of tulathromycin is 15 μg/kg of body weight per day.
(b) Tolerances. The tolerances for CP–60,300 (marker residue) are:
   (1) Cattle. Liver (target tissue): 5.5 ppm.
   (c) Related conditions of use. See §§ 522.2630 and 522.2632 of this chapter.

§ 556.746 Tylosin.
(a) [Reserved]
(b) Tolerances. The tolerances for tylosin are:
   (1) Cattle. (i) Liver, kidney, fat, and muscle: 0.2 ppm.
   (ii) Milk: 0.05 ppm.
   (2) Chickens and turkeys. (i) Liver, kidney, fat, and muscle: 0.2 ppm.
   (ii) Eggs: 0.2 ppm.
   (3) Swine. Liver, kidney, fat, and muscle: 0.2 ppm.
   (4) Honey. 500 ppb.
   (c) Related conditions of use. See §§ 520.2640, 522.2640, 558.625, and 558.630 of this chapter.

§ 556.748 Tyvalosin.
(a) Acceptable daily intake (ADI). The ADI for total residues of tyvalosin is 47.7 μg/kg of body weight per day.
(b) Tolerances. A tolerance for tyvalosin in edible tissues of swine is not required.
(c) Related conditions of use. See §§ 520.2645 and 558.633 of this chapter.

§ 556.750 Virginiamycin.
(a) Acceptable daily intake (ADI). The ADI for total residue of virginiamycin is 250 μg/kg of body weight per day.
(b) Tolerances. The tolerances for virginiamycin are:
   (1) Cattle. Edible tissues (excluding milk): Not required.
§ 556.760 Zeranol.

(a) Acceptable daily intake (ADI). The ADI for total residue of zeranol is 1.25 μg/kg of body weight per day.

(b) Tolerances. The tolerances for zeranol are:

(1) Cattle. Edible tissues (excluding milk): Not required.

(2) Sheep. Edible tissues (excluding milk): 20 ppb.

(c) Related conditions of use. See §558.635 of this chapter.

§ 556.765 Zilpaterol.

(a) Acceptable daily intake (ADI). The ADI for total residue of zilpaterol is 0.083 μg/kg of body weight per day.

(b) Tolerances. The tolerance for zilpaterol freebase (marker residue) is:

(1) Cattle. (i) Liver (target tissue): 12 ppb.

(ii) Muscle: 10 ppb.

(2) Sheep. [Reserved]

(c) Related conditions of use. See §558.665 of this chapter.

§ 556.770 Zoalene.

(a) [Reserved]

(b) Tolerances. The tolerances for zoalene and its metabolite 3-amino-5-nitro-o-toluamide are:

(1) Chickens. (i) Liver and kidney: 6 ppm.

(ii) Muscle: 3 ppm.

(iii) Fat: 2 ppm.

(2) Turkeys. Liver and muscle: 3 ppm.

(c) Related conditions of use. See §558.680 of this chapter.