

§ 556.739

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§ 556.739 **Trenbolone.**

(a) *Acceptable daily intake (ADI)*. The ADI for total residues of trenbolone is 0.4 microgram per kilogram of body weight per day.

(b) *Tolerances*. A tolerance for total trenbolone residues in uncooked edible tissues of cattle is not needed.

[64 FR 18574, Apr. 15, 1999]

§ 556.740 **Tylosin.**

Tolerances are established for residues of tylosin in edible products of animals as follows:

(a) In chickens and turkeys: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(b) In cattle: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(c) In swine: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(d) In milk: 0.05 part per million (negligible residue).

(e) In eggs: 0.2 part per million (negligible residue).

§ 556.741 **Tripelennamine.**

A tolerance of 200 parts per billion (ppb) is established for residues of tripelennamine in uncooked edible tissues of cattle and 20 ppb in milk.

[62 FR 4164, Jan. 29, 1997]

§ 556.750 **Virginiamycin.**

(a) *Acceptable daily intake (ADI)*. The ADI for total residues of virginiamycin is 250 micrograms per kilogram of body weight per day.

(b) *Tolerances*—(1) *Swine*. Tolerances are established for residues of virginiamycin in uncooked edible tissues of 0.4 part per million (ppm) in kidney, skin, and fat, 0.3 ppm in liver, and 0.1 ppm in muscle.

(2) *Broiler chickens and cattle*. A tolerance for residues of virginiamycin is not required.

[64 FR 48296, Sept. 3, 1999]

§ 556.760 **Zeranol.**

(a) *Cattle*. A tolerance for total zeranol residues in uncooked edible tissues of cattle is not needed. The safe concentration for total zeranol resi-

dues in uncooked edible tissues of cattle is 150 parts per billion (ppb) in muscle, 300 ppb in liver, 450 ppb in kidney, and 600 ppb in fat. A tolerance refers to the concentration of marker residues in the target tissue used to monitor for total drug residues in the target animal. A safe concentration refers to the total residue concentration considered safe in edible tissues.

(b) *Sheep*. No residues of zeranol may be found in the uncooked edible tissues of sheep as determined by the following method of analysis:

I. METHOD OF ANALYSIS—ZERANOL

A gas chromatographic method for the determination of the drug in frozen beef tissues is described. Tissue is frozen and stored in a deep freezer until ready for examination. A weighed portion of wet tissue (with exception of fat) is homogenized and lyophilized to dry solid. The drug is recovered from dry tissue by an extraction with methanol in a Soxhlet extractor. The methanol extract is digested in the presence of hydrochloric acid to hydrolyze conjugates should any be present. Elimination of impurities is brought about by liquid partition transfer successively to chloroform to 1N sodium hydroxide, to carbon tetrachloride, to 1N sodium hydroxide, to ethyl ether, and, finally, to a dry residue. The residue is reacted with a silane mixture to create a volatile derivative which is quantitated by peak area measurements from a flame ionization detector. The drug can be detected at a level of 20 parts per billion with negligible interference from tissues or reagents.

II. REAGENTS

A. Carbon tetrachloride, N.F., Fisher Scientific C-186, or equivalent.

B. Chloroform, N.F., Fisher Scientific C-296, or equivalent.

C. Chromatograph gases, flow rates adjusted to maximize sensitivity for specific chromatograph.

1. Carrier gas, conventional tank helium.

2. Flame makeup gas.

a. Oxygen, conventional tank oxygen.

b. Hydrogen, Linde high purity, or equivalent.

D. Column packing, 3 percent GE SE-52 (Applied Science Laboratories) on P.E. Celite 60-80 mesh (Johns Manville Product No. 154-0048), or equivalent.

E. Ether, anhydrous, Fisher Scientific E-138, or equivalent.

F. Hexamethyldisilazane, Dow-Corning, Peninsular, or equivalent.

G. Hydrochloric acid, analytical reagent grade.