calculating a "t" value according to the formula:
\[
   t = \frac{\bar{x}_t - \bar{x}_c}{\sqrt{\left(\frac{s_t^2}{n_t}\right) + \left(\frac{s_c^2}{n_c}\right)}}
\]

where:
- \(\bar{x}_t\) and \(\bar{x}_c\) are the means of the logs of the pericardial fluid volumes of the test and control groups, respectively;
- \(n_t\) and \(n_c\) are the number of chicks in the respective groups;
- \(s_t^2\) and \(s_c^2\) are the variances of the test and control groups, respectively.

The variances are calculated as follows:
\[
   s^2 = \frac{m(\Sigma x^2) - (\Sigma x)^2}{n(n-1)}
\]

where:
- \(\Sigma x\) is the sum of the logs of the pericardial fluid volumes;
- \(\Sigma x^2\) is the sum of the squares of the logs of the pericardial fluid volumes for either the test or control group data.

The test sample is judged to contain chick-edema factor if the calculated "t" exceeds +1.3 and the mean log of the pericardial fluid volume obtained from the negative control group multiplied by 100 is less than 1.1461.

(ii) "Other factors toxic to chicks" referred to in paragraph (b)(3) of this section shall be determined during the course of the bioassay test described in paragraph (b)(4)(ii) of this section, on the basis of chick deaths or other abnormalities not attributable to chick-edema factor or to the experimental conditions of the test.

(c) It is used or intended for use as a supplementary source of fat for animal feed.

(d) To assure safe use of the additive, in addition to the other information required by the act:
   (1) The label and labeling of the additive, and any feed additive supplement, feed additive concentrate, feed additive premix, or complete feed prepared therefrom shall bear adequate directions for use.


§ 573.680 Mineral oil.

Mineral oil may be safely used in animal feed, subject to the provisions of this section.

(a) Mineral oil, for the purpose of this section, is that complying with the definition and specifications contained in §172.878 (a) and (b) or in §178.3620(b)(1) (i) and (ii) of this chapter.

(b) It is used in animal feeds for the following purposes:
   (1) To reduce dustiness of feeds or mineral supplements.
   (2) To serve as a lubricant in the preparation of pellets, cubes, or blocks to improve resistance to moisture of such pellets, cubes, or blocks.
   (3) To prevent the segregation of trace minerals in mineralized salt.
   (4) To serve as a diluent carrier in the manufacture of feed grade biuret in accordance with good manufacturing practice.
   (5) For the removal of water from substances intended as ingredients of animal feed.

(c) The quantity of mineral oil used in animal feed shall not exceed 3.0 percent in mineral supplements, nor shall it exceed 0.06 percent of the total ration when present in feed or feed concentrates.

[41 FR 38652, Sept. 10, 1976, as amended at 47 FR 41106, Sept. 17, 1982]

§ 573.685 Natamycin.

The food additive natamycin (CAS No. 7681–93–8) may be safely used in

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