

(2) *Labeling.* (i) On the label of the immediate container and on the outside wrapper or container, if any:

(a) The batch mark.

(b) The name and quantity of each active ingredient contained in the drug.

(c) An expiration date that conforms to the requirements prescribed by § 432.5(a)(3) of this chapter.

(ii) On the label of the immediate container or other labeling attached to or within the package, adequate directions under which the layman can use the drug safely and efficaciously.

(3) *Requests for certification; samples.* In addition to complying with the requirements of § 431.1 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(a) The bacitracin zinc used in making the batch for potency, loss on drying, pH, zinc content, and identity.

(b) The polymyxin B sulfate used in making the batch for potency, loss on drying, pH, and identity.

(c) The batch for bacitracin content, polymyxin B content, moisture, and a microorganism count.

(ii) Samples, if required by the Director, Center for Drug Evaluation and Research:

(a) The bacitracin zinc used in making the batch: 10 packages, each containing approximately 1.0 gram.

(b) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately 1.0 gram.

(c) The batch: A minimum of 12 intermediate containers.

(b) *Tests and methods of assay—(1) Potency—(i) Sample preparation.* Spray, as directed in the labeling, the entire contents of each container to be tested into a separate 2-liter Erlenmeyer flask, held in a horizontal position. Add 500 milliliters of 0.01N hydrochloric acid and shake to dissolve the contents. Immediately remove aliquots of this sample solution and proceed as directed paragraph (b)(1)(i)(a) and (b) of this section for each antibiotic to be tested.

(a) *Bacitracin content.* Proceed as directed in § 436.105 of this chapter, diluting an aliquot of the sample solution with 1 percent potassium phosphate buffer, pH 6.0 (solution 1), to the refer-

ence concentration of 1.0 unit of bacitracin per milliliter (estimated).

NOTE: The final sample solution must contain the same amount of hydrochloric acid as the reference concentration of the working standard.

(b) *Polymyxin B content.* Proceed as directed in § 436.105 of this chapter, diluting an aliquot of the sample solution with 10 percent potassium phosphate buffer, pH 6.0 (solution 6), to the reference concentration of 10.0 units of polymyxin B per milliliter (estimated).

(ii) [Reserved]

(2) *Moisture.* Proceed as directed in § 436.201 of this chapter.

(3) *Microorganism count—(i) Conduct of test for bacteria.* Thoroughly cleanse the valve of each container to be tested with a suitable disinfectant. Into an empty, sterile Erlenmeyer flask, stoppered with a cotton plug, spray about one-half of the contents of each of five separate immediate containers by removing the cotton plug temporarily and using aseptic technique. Allow the propellant to evaporate. To the dry residue, which should not exceed 1 gram, add 500 milliliters of diluting fluid C as described in § 436.20(d)(3) of this chapter. Stopper the flask and swirl to dissolve the drug. As soon as the sample has completely dissolved, proceed as directed in § 436.20(e)(1)(ii) of this chapter, except after the three washings transfer the entire filter membrane to the surface of medium N as described in § 436.20(c)(14) of this chapter. Incubate the plate for 7 days at 30° C. to 32° C. Count the number of colonies appearing on the filter pad and calculate therefrom the number of viable microorganisms per gram of powder.

(ii) *Conduct of test for molds and yeasts.* Proceed as directed in paragraph (b)(3)(i) of this section, except transfer the entire filter membrane to the surface of medium N as described in § 436.20(c)(14) of this chapter, and incubate at 25° C. for 7 days.

[42 FR 27237, May 27, 1977, as amended at 50 FR 15110, Apr. 17, 1985; 55 FR 11584, Mar. 29, 1990; 55 FR 40381, Oct. 3, 1990]

§ 448.513f Bacitracin zinc ointment.

(a) *Requirements for certification—(1) Standards of identity, strength, quality,*

and purity. Bacitracin zinc ointment is composed of 500 units of bacitracin zinc per gram in a suitable ointment base. Its potency is satisfactory if it is not less than 90 percent and not more than 140 percent of the number of units of bacitracin that it is represented to contain. Its moisture content is not more than 0.5 percent. The bacitracin zinc used conforms to the standards prescribed by § 448.13(a)(1).

(2) *Labeling*—(i) On the label of the immediate container and on the outside wrapper or container, if any:

(a) The batch mark.

(b) The name and quantity of each active ingredient contained in the drug.

(c) An expiration date that conforms to the requirements prescribed by § 432.5(a)(3) of this chapter.

(ii) On the label of the immediate container or other labeling attached to or within the package, adequate directions under which the layman can use the drug safely and efficaciously.

(3) *Requests for certification; samples.* In addition to complying with the requirements of § 431.1 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(a) The bacitracin zinc used in making the batch for potency, loss on drying, pH, zinc content, and identity.

(b) The batch for potency and moisture.

(ii) Samples required:

(a) The bacitracin zinc used in making the batch: 10 packages, each containing 1.0 gram.

(b) The batch: A minimum of six immediate containers.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 436.105 of this chapter, preparing the sample for assay as follows: Place an accurately weighed representative portion of the sample into a separatory funnel containing approximately 50 milliliters of peroxide-free ether. Shake the sample and ether until homogeneous. Add 20 to 25 milliliters of 0.01*N* hydrochloric acid and shake well. Allow the layers to separate. Remove the acid layer and repeat the extraction procedure with each of three more 20- to 25-milliliter quantities of 0.01*N* hydrochloric acid. Combine the acid extractives in a suitable volumetric flask and dilute to vol-

ume with 0.01*N* hydrochloric acid. (If the bacitracin content is less than 100 units per milliliter in 0.01*N* hydrochloric acid, add sufficient additional hydrochloric acid to each concentration of the standard response line so that each standard solution contains the same amount of acid as the 1.0 unit per milliliter sample solution.) Remove an aliquot and further dilute with 1.0 percent potassium phosphate buffer, pH 6.0 (solution 1), to the reference concentration of 1.0 unit of bacitracin per milliliter (estimated).

(2) *Moisture.* Proceed as directed in § 436.201 of this chapter.

[42 FR 27237, May 27, 1977, as amended at 50 FR 19920, May 13, 1985]

Subpart G—Vaginal Dosage Forms [Reserved]

Subparts H–I [Reserved]

Subpart J—Certain Other Dosage Forms

§ 448.910 Bacitracin for prescription compounding.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Bacitracin for prescription compounding is a white to brown, neutral, water-soluble polypeptide intended for use in the extemporaneous compounding of prescriptions by practicing pharmacists. It is so purified and dried that:

(i) Its potency is not less than 40 units of bacitracin per milligram.

(ii) [Reserved]

(iii) Its loss on drying is not more than 5.0 percent.

(iv) Its pH in an aqueous solution containing 10,000 units per milliliter is not less than 5.5 and not more than 7.5.

(v) It passes the identity test.

(2) *Packaging.* The immediate container shall be of colorless, transparent glass, and it shall be a tight container as defined by the United States Pharmacopeia (U.S.P.). It shall be so sealed that the contents cannot be used without destroying such seal. Each such container shall contain 500,000 or 5 million units of bacitracin.

(3) *Labeling.* Each package shall bear on its outside wrapper or container and