

and harmless diluents, buffer substances, colorings and flavorings. When reconstituted as directed in the labeling, each milliliter contains cefaclor monohydrate equivalent to 25 milligrams, 37.5 milligrams, 50 milligrams, or 75 milligrams of cefaclor. Its potency is satisfactory if it is not less than 90 percent and not more than 120 percent of the number of milligrams of cefaclor that it is represented to contain. Its moisture content is not more than 2.0 percent. When reconstituted as directed in the labeling, its pH is not less than 2.5 and not more than 5.0. The cefaclor monohydrate used conforms to the standards prescribed by § 442.4(a)(1).

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 432.5 of this chapter.

(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 cefaclor monohydrate used in making the batch for potency, moisture, pH, identity, and crystallinity.

(b) The batch for potency, moisture, and pH.

(ii) Samples required:

(a) The cefaclor monohydrate used in making the batch: 10 packages, each containing approximately 300 milligrams.

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

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 442.40(b)(1)(ii) of this chapter, except prepare the working standard and sample solutions and calculate the potency of the sample as follows:

(i) *Preparation of working standard solution.* Dissolve and dilute an accurately weighed portion of the cefaclor working standard in sufficient 0.1M potassium phosphate buffer, pH 4.5 (as described in § 436.101(a)(4) of this chapter) to obtain a concentration of 1 milligram of cefaclor per milliliter.

(ii) *Preparation of sample solution.* Reconstitute the sample as directed in the labeling. Transfer a 5.0-milliliter portion into an appropriate-sized volumetric flask and dilute to volume with 0.1M potassium phosphate buffer, pH 4.5 (as described in § 436.101(a)(4) of this

chapter) to obtain a concentration of 1 milligram of cefaclor per milliliter.

(iii) *Calculations.* Calculate the cefaclor content as follows:

$$\text{Milligrams of cefaclor for 5 milliliters of sample} = \frac{A_u \times P_a \times d}{A_s \times 1,000}$$

where:

A_u = Absorbance of sample solution;

P_a = Potency of working standard in micrograms per milliliter;

A_s = Absorbance of working standard solution;

d = Dilution factor of the sample.

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

(3) *pH.* Proceed as directed in § 436.202 of this chapter, using the drug reconstituted as directed in the labeling.

[46 FR 3833, Jan. 16, 1981; 46 FR 21360, Apr. 10, 1981, as amended at 47 FR 22515, May 25, 1982; 54 FR 41824, Oct. 12, 1989]

§ 442.106 Cefadroxil monohydrate oral dosage forms.

§ 442.106a Cefadroxil monohydrate capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Cefadroxil monohydrate capsules are composed of cefadroxil monohydrate and one or more suitable and harmless lubricants and diluents enclosed in a gelatin capsule. Each capsule contains either 250 or 500 milligrams of cefadroxil. Its moisture content is not more than 7.0 percent. The cefadroxil monohydrate used conforms to the standards prescribed by § 442.6(a)(1).

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 432.5 of this chapter.

(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 cefadroxil monohydrate used in making the batch for potency, moisture, pH, absorptivity, identity, and crystallinity.

(b) The batch for potency and moisture.

(ii) Samples required:

(a) The cefadroxil monohydrate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(b) The batch: A minimum of 30 capsules.

(b) *Tests and methods of assay*—(1) *Potency*. Use either of the following methods; however, the results obtained from the hydroxylamine colorimetric assay shall be conclusive.

(i) *Microbiological agar diffusion assay*. Proceed as directed in §436.105 of this chapter, preparing the sample for assay as follows: Place a representative number of capsules into a high-speed glass blender jar containing sufficient 1 percent potassium phosphate buffer, pH 6.0 (solution 1), to give a stock solution of convenient concentration. Blend for 3 to 5 minutes. Remove an aliquot and further dilute with solution 1 to the reference concentration of 20.0 micrograms of cefadroxil per milliliter (estimated).

(ii) *Hydroxylamine colorimetric assay*. Proceed as directed in §442.40(b)(1)(ii) of this chapter, preparing the sample as follows: Blend a representative number of capsules in a high-speed glass blender jar with sufficient distilled water to give a stock solution of convenient concentration. Further dilute an aliquot of this solution with distilled water to a concentration of 1 milligram of cefadroxil per milliliter (estimated).

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

[43 FR 20978, May 16, 1978; 43 FR 27180, June 23, 1978; 45 FR 16472, Mar. 14, 1980. Redesignated and amended at 46 FR 2992, Jan. 13, 1981; 50 FR 19919, May 13, 1985]

§ 442.106b Cefadroxil monohydrate tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity*. Cefadroxil monohydrate tablets are composed of cefadroxil monohydrate and one or more suitable and harmless binders and lubricants, and with or without coloring and film-coating substances. Each tablet contains cefadroxil monohydrate equivalent to 1,000 milligrams of cefadroxil. Its potency is satisfactory if it is not less than 90 percent and not more than 120 percent of the number of milligrams of cefadroxil that it is represented to contain. Its moisture content is not more than 8.0 percent. The tablets disintegrate within 15 minutes.

The cefadroxil monohydrate used conforms to the standards prescribed by §442.6(a)(1).

(2) *Labeling*. It shall be labeled in accordance with the requirements of §432.5 of this chapter.

(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 cefadroxil monohydrate used in making the batch for potency, moisture, pH, absorptivity, identity, and crystallinity.

(b) The batch for potency, moisture, and disintegration time.

(ii) Samples required:

(a) The cefadroxil monohydrate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(b) The batch: A minimum of 36 tablets.

(b) *Tests and methods of assay*—(1) *Potency*. Use either of the following methods; however, the results obtained from the hydroxylamine colorimetric assay shall be conclusive.

(i) *Microbiological agar diffusion assay*. Proceed as directed in §436.105 of this chapter, preparing the sample for assay as follows: Place a representative number of tablets into a high-speed glass blender jar containing sufficient 1 percent potassium phosphate buffer, pH 6.0 (solution 1), to obtain a stock solution of convenient concentration. Blend for 3 to 5 minutes. Further dilute an aliquot of the stock solution with solution 1 to the reference concentration of 20 micrograms of cefadroxil per milliliter (estimated).

(ii) *Hydroxylamine colorimetric assay*. Proceed as directed in §442.40(b)(1)(ii) of this chapter, except prepare the working standard and sample solutions and calculate the cefadroxil content as follows:

(a) *Preparation of working standard solution*. Dissolve and dilute an accurately weighed portion of the cefadroxil working standard in sufficient distilled water to a final concentration of 1 milligram of cefadroxil per milliliter.

(b) *Preparation of sample solution*. Blend a representative number of tablets in a high-speed glass blender jar