Issued in Washington, DC, on April 22, 1994.

Thomas C. Accardi,

Director, Flight Standards Service.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, part 97 of the Federal Aviation Regulations (14 CFR part 97) is amended by establishing, amending, suspending, or revoking Standard Instrument Approach Procedures, effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. app. 1348, 1354(a), 1421 and 1510; 49 U.S.C. 106(g); and 14 CFR 11.49(b)(2).

2. Part 97 is amended to read as follows:

§§ 97.23, 97.25, 97.27, 97.29, 97.31, 97.33, and 97.35 [Amended]

By amending: § 97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; § 97.25 LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME; § 97.27 NDB, NDB/DME; § 97.29 ILS, ILS/DME, ISMLS, MLS, MLS/DME, MLS/RNAV; § 97.31 RADAR SIAPs; § 97.33 RNAV SIAPs; and § 97.35 COPTER SIAPs, identified as follows:

* * * EFFECTIVE DATE JUNE 23, 1994

	State	City	Airport	FDC No.	SIAP
04/06/94 ...	AK	Cold Bay	Cold Bay	FDC 4/1592	ILS Rwy 14 Amdt 14...
04/06/94 ...	AK	Cold Bay	Cold Bay	FDC 4/1593	Loc/DME BC Rwy 32 Amdt 6...
04/06/94 ...	AK	Cold Bay	Cold Bay	FDC 4/1594	VOR/DME OR TACAN–A Orig...
04/06/94 ...	AK	Cold Bay	Cold Bay	FDC 4/1595	VOR Rwy 14 Amdt 12...
04/06/94 ...	AK	Cold Bay	Cold Bay	FDC 4/1596	NDB Rwy 14 Amdt 10...
04/08/94 ...	ME	Fryeburg	Eastern Slopes Regional	FDC 4/1624	NDB–B Orig...
04/08/94 ...	MN	Winona	Winona Muni-max Conrad Field	FDC 4/1627	VOR–A Amdt 11A...
04/11/94 ...	OH	Columbus	Port Columbus Intl	FDC 4/1654	ILS Rwy 28L Amdt 26...
04/13/94 ...	NV	Winnemucca	Winnemucca Muni	FDC 4/1669	NDB–A Amdt 1...
04/15/94 ...	MA	Norwood	Norwood Memorial	FDC 4/1676	NDB Rwy 35 Amdt 6...
04/15/94 ...	MA	Norwood	Norwood Memorial	FDC 4/1677	LOC Rwy 35 Amdt 6...
04/18/94 ...	CT	Winsor Locks	Bradley International	FDC 4/1731	VOR OR TACAN Rwy 15, Amdt 2...
04/19/94 ...	MT	Choteau	Choteau	FDC 4/1769	NDB Rwy 23 Orig...

[FR Doc. 94–12778 Filed 5–24–94; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 103

[Docket No. 92N–0059]

Quality Standards for Foods With No Identity Standards; Bottled Water

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the standard of quality regulation for bottled water to establish an allowable level of 0.005 milligrams per liter (mg/L) for lead in bottled water. FDA also is retaining the existing allowable level of 1.0 mg/L for copper in bottled water. This final rule will ensure both that the minimum quality of bottled water with respect to copper and lead remains comparable to the quality of public drinking water, and that bottled water will be free of any significant lead contamination. This final rule is consistent with FDA's goal of reducing consumers' exposure to lead in drinking water to the extent practicable.

DATES: Effective November 21, 1994. The Director of the Office of the Federal Register approves the incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 of certain publications in 21 CFR 103.35(d)(3)(v), effective November 21, 1994.

FOR FURTHER INFORMATION CONTACT: Henry S. Kim, Center for Food Safety and Applied Nutrition (HFS–306), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–205–4681.

SUPPLEMENTARY INFORMATION:

I. Background

Under section 410 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 349), whenever the Environmental Protection Agency (EPA) prescribes interim or revised National Primary Drinking Water Regulations (NPDWR's) under section 1412 of the Public Health Service Act (The Safe Drinking Water Act (SDWA) (42 U.S.C. 300f through 300j-9)), FDA is required to consult with EPA and either amend its regulations for bottled drinking water (§ 103.35(21 CFR 103.35)) or publish in the **Federal Register** its reasons for not making such amendments.

In the **Federal Register** of June 7, 1991 (56 FR 26460), EPA published a final rule promulgating NPDWR's that established corrosion control treatment technique requirements for controlling lead and copper levels in public water systems when these contaminants exceed levels of 0.015 mg/L for lead and 1.3 mg/L for copper in more than 10 percent of targeted tap samples. Targeted tap water samples represent samples collected from residences most likely to have lead problems as a result of corrosion in the distribution systems. EPA established treatment technique requirements rather than maximum contaminant levels (MCL's) for lead and copper in drinking water because it believed that treatment technique requirements are more appropriate to control contamination of lead and

copper that is largely the result of circumstances beyond the direct control of public water systems (i.e., corrosion in service lines not owned by the systems and in the plumbing of residences and buildings). In addition, EPA established maximum contaminant level goals (MCLG's) of zero for lead and 1.3 mg/L for copper which are based solely on considerations of protecting the public from the adverse health effects of these contaminants in drinking water.

In accordance with section 410 of the act, FDA published in the Federal Register of January 5, 1993 (58 FR 389), a proposal to amend the quality standard for bottled water to establish an allowable level of 0.005 mg/L for lead and to retain the existing allowable level of 1.0 mg/L for copper. FDA proposed a lower level of 0.005 mg/L for lead in bottled water than EPA's level of 0.015 mg/L for lead in drinking water that triggers treatment technique requirements. FDA's data showed that most bottlers do not normally experience the significant lead contamination problems from corrosion of materials that are presented by public water distribution systems and residential plumbing (e.g., pipes, faucets, and solder), and that bottlers can produce bottled water products with lead levels below 0.005 mg/L. Furthermore, this level represents the lowest level at which FDA can take enforcement action because it corresponds to the practical quantitation limit (PQL) of the best available analytical methods for determining lead levels in water. Finally, FDA noted that establishing the allowable level for lead at 0.005 mg/L would provide public health protection at least equivalent to that provided by EPA's NPDWR and would ensure that bottled water products are free of significant lead contamination.

With respect to the allowable level for copper, the existing allowable level of 1.0 mg/L in bottled water is below EPA's MCLG of 1.3 mg/L and is equivalent to EPA's secondary maximum contaminant level (SMCL), which is based on the aesthetic effects of copper in drinking water. Thus, FDA proposed to retain the existing allowable level to ensure that levels of copper in bottled water meet the safety and aesthetic criteria that EPA has established for copper in drinking water.

On November 8, 1990, the enactment of the Nutrition Labeling and Education Act of 1990 (Pub. L. 101–535) removed standard of quality rulemakings from the coverage of the formal rulemaking procedures in section 701(e) of the act (21 U.S.C. 371(e)). FDA, therefore, proposed the amendments to the bottled water quality standard regulations for lead and copper using notice and comment rulemaking under section 701(a) of the act. Interested persons were given until March 8, 1993, to comment on the proposed regulation.

II. Summary of and Response to Comments

A. Summary of Comments

FDA received approximately 130 responses to the January 5, 1993, proposal. Each of these responses contained one or more comments from industry, consumers, trade associations, Federal government officials, State government agencies, consumer advocacy organizations, and a private research foundation. The comments generally supported the proposal. Many comments addressed issues that are outside the scope of the proposal (e.g., allowable levels for total trihalomethanes, chlorine, and fluoride in the quality standard for bottled water). These comments will not be discussed here. A number of comments suggested modifications to, or were opposed to, various provisions of the proposal. A summary of the suggested changes, the opposing comments, and the agency's responses follows.

B. Response to Comments

1. Most comments supported the proposed allowable levels of 0.005 mg/L for lead and 1.0 mg/L for copper in the quality standard for bottled water. One comment, however, stated that the allowable level for lead in bottled water should not be any lower than EPA's corrosion treatment trigger level of 0.015 mg/L for lead in drinking water because this level corresponds to an average lead level of 0.005 mg/L, the level which most bottled waters do not exceed. The comment argued that the fact that 0.005 mg/L is at the lower limit of reliable measurement for lead does not justify setting a standard at that level. The comment further argued that setting a standard for lead in bottled water is not necessary because lead content is not a problem in bottled water. The comment maintained that imposing regulations for the sake of regulation is a problem because of the high costs incurred by diverting FDA resources from significant regulatory concerns.

FDA disagrees with this comment. Under section 410 of the act, FDA's approach has been to respond to EPA's promulgation of drinking water regulations under the SDWA by amending the quality standard for bottled water to maintain compatibility with EPA's regulations. FDA concludes that amending the standard for lead in bottled water to 0.005 mg/L is fully compatible and consistent with the EPA standard.

Based on the available health effects information, EPA established an MCLG of zero for lead in drinking water. By adopting this MCLG, EPA was in effect saying that if zero lead in drinking water can be achieved, it should be achieved. However, EPA concluded that zero lead in public drinking water could not be achieved because of contamination of the water with lead from corrosion of lead-containing materials in public water distribution systems and in residential plumbing. To control this contamination, EPA established treatment technique requirements which are triggered when more than 10 percent of the targeted tap water samples exceeds 0.015 mg/L for lead.

Bottled water, however, generally does not have significant lead contamination problems. FDA conducted a survey of bottled water in 1990 (Ref. 1), and the findings of that survey show that most bottlers are using source waters that are free of significant lead contamination and can readily produce bottled water products with lead levels below 0.005 mg/L, the PQL for lead in water. Consequently, because this level, which is as close to EPA's MCLG of zero as possible, is achievable in bottled water, there is no reason for FDA to rely on EPA's 0.015 mg/L trigger level in establishing an allowable level for lead in bottled water. In fact, in its review and comment on FDA's proposal (before it published in the Federal Register), EPA stated that the regulatory approach taken by FDA to establish an allowable level of 0.005 mg/L for lead in bottled water is consistent with the intent of the NPDWR for lead in public drinking water (Ref. 4).

2. One comment asserted that there is no safe threshold for lead in drinking water and, because technological resources and knowledge make it feasible to measure lead in water at the 0.002 mg/L level, FDA should establish the allowable level for lead in bottled water at that level. The comment contended that, because large water companies have been testing for lead and reporting lead levels of 0, 0.001, 0.002, 0.003, and 0.004 mg/L to EPA, the PQL is substantially lower than 0.005 mg/L. The comment stated that another organization, which has limited resources and is not in the business of supplying water commercially, uses a laboratory that has found the PQL to be 0.002 mg/L when testing for lead in bottled water. The comment further argued that EPA's PQL concept is

theoretically inappropriate for safety determinations because the error theory of laboratory measurements (i.e., the distinction between the standard error of a single measurement and the standard error among a group of measurements) upon which EPA bases its determination of the PQL is misleading.

FDA disagrees that EPA's PQL concept is inappropriate. EPA's PQL is set at the lowest concentration for a contaminant that laboratories certified by the States or by EPA for water analyses can reliably measure within specified limits of precision and accuracy under routine laboratory operating conditions. EPA also determines the PQL based on the method detection limit (MDL), which is defined as the lowest concentration of a substance that can be measured with 99 percent confidence that the true value is greater than zero. EPA generally sets the PQL at 5 to 10 times the MDL, depending on the degree of health risk posed by a contaminant (for contaminants like lead that pose a high degree of health risk, EPA sets the PQL at 5 times the MDL), and, if possible, confirms the PQL by interlaboratory performance evaluation studies.

Based on EPA's calculation of a 0.001 mg/L MDL for lead by the most sensitive analytical methods available, EPA set the PQL for lead at 0.005 mg/L. EPA confirmed this level by performance evaluation studies that evaluated the ability of EPA, State, and non-EPA and State laboratories to analyze water samples with low lead levels (56 FR 26460 at 26511, June 7, 1991).

Although the comment stated that a laboratory used by another organization found the PQL to be 0.002 mg/L for lead in bottled water, it did not provide any data to support that laboratory's determination. Therefore, this comment has not provided an adequate basis upon which to call into question EPA's PQL.

In summary, based on the studies conducted by EPA establishing a PQL of 0.005 mg/L for lead in drinking water, FDA finds that an allowable level of 0.005 mg/L for lead in the quality standard for bottled water is appropriate.

3. Another comment stated that, although it strongly endorsed the proposed allowable level for lead in bottled water, FDA should review this standard in a few years because EPA's 1991 rule for lead in drinking water has led to increased analysis for lead in water, and, using the best available methodology, many laboratories can now routinely measure lead levels at 0.001 or 0.002 mg/L in water samples. The comment maintained that measurement of lead in water at these levels may soon be the standard, "state of the art" technology, and that it would be appropriate to set the allowable level in bottled water at the limit of detection, i.e., 0.005 mg/L, or no detectable lead, whichever is less.

FDA disagrees that establishing the allowable level for lead in bottled water at the limit of detection, i.e., 0.005 mg/L, or no detectable lead, whichever is less, is appropriate. As discussed above, 0.005 mg/L, the PQL for lead in water, represents the lowest concentration that State- or EPA-certified laboratories for water analyses can reliably measure within specified limits of precision and accuracy under routine laboratory operating conditions. FDA recognizes that lead levels in water can be measured below 0.005 mg/L. However, to take an enforcement action based on level of a contaminant in a food, FDA must be able to reliably establish the level of the contaminant in the food. EPA's PQL of 0.005 mg/L has been confirmed by performance evaluation studies as the lowest level of lead in water samples that can be reliably and consistently measured (56 FR 26460 at 26511). Thus, FDA has concluded that reliance on the PQL as the allowable level for lead in bottled water is appropriate.

Nevertheless, FDA agrees that technology for analytical methodology is constantly advancing. Reliable measurement of lead levels below 0.005 mg/L in water samples, within specified limits of precision and accuracy under routine laboratory operating conditions, may soon become the general norm. Therefore, FDA agrees with the comment that within the next few years, it should consult with EPA about reevaluating the PQL for lead in water. Moreover, FDA recognizes that, should EPA revise the PQL, FDA will need to consider whether an allowable level for lead in bottled water below 0.005 mg/L is appropriate.

4. A State government agency and a majority of the comments from industry and trade associations opposed the statement in the proposal that if the proposal becomes a final rule, bottlers will be required to test each lot of bottled water to ensure that it contains less than 0.005 mg/L of lead. The comments argued that, because most bottlers are routinely meeting the 0.005 mg/L standard for lead, a requirement for testing each lot of bottled water for lead is not necessary. Furthermore, the majority of the comments argued that testing each lot of bottled water for lead would impose a significant financial burden on the bottled water industry. For example, comments from two trade associations representing bottled water manufacturers maintained that a requirement for testing each lot of bottled water for lead would impose additional annual costs that they estimated at $15,000 for a small bottler and $300,000 for a large bottler.

Under the current good manufacturing practice (CGMP) regulations for the processing and bottling of bottled drinking water (part 129 (21 CFR part 129)), bottlers are required to analyze, at least annually, for chemical contaminants, including lead, in a representative sample from a batch or a segment of a continuous production run for each type of bottled drinking water produced during a day's production (§ 129.80(g)(2)). Therefore, bottlers will not be required to test each lot of bottled water for the presence of lead. The statement that they would, which was inadvertently included in the economic impact analysis, was in error.

However, FDA reminds water bottlers that each lot of bottled water must comply with the quality standard for chemical contaminants, and compliance with the minimum annual testing requirements of the CGMP does not exempt a firm from regulatory action if any lot of bottled water does not meet any provision of the chemical quality standard.

5. Several comments recommended that testing for chemical contaminants (e.g., lead and copper) should be more frequent than the required minimum of annual testing. One comment noted that, although FDA has established quality standards for bottled water, it did not set any requirements for monitoring timeframes or submission of results to ensure that bottlers meet the quality standards. Moreover, the comment objected to allowing distribution of a bottled water product that is below the water quality standard, arguing that, given the emphasis on the quality of bottled water verses tap water by the bottled water industry, bottlers are not likely to print a "substandard" statement on the label.

FDA agrees that bottlers are not likely to market bottled water that would be required to bear a statement of substandard quality with respect to lead. However, FDA notes that the use of such a statement on the label of a food covered by a standard of quality is specifically provided for by section 403(h)(1) of the act (21 U.S.C. 343(h)(1)), if that food falls below the prescribed quality standard. Therefore, FDA cannot preclude the use of the statement of substandard quality. Nonetheless, § 103.35(g) provides that any bottled

water containing a substance at a level considered injurious to health under section 402 of the act (21 U.S.C. 342) is deemed to be adulterated and may be subject to regulatory action, even if the bottled water bears a label statement of substandard quality.

FDA notes that the CGMP regulations for processing and bottling of bottled drinking water (part 129) require that the water to be bottled be obtained from an approved source properly located, protected, and operated; be of a safe, sanitary quality; and be in compliance at all times with the applicable laws and regulations of the government agency or agencies having jurisdiction (§ 129.35). In addition, § 129.35(a) requires that samples of source water be analyzed as often as necessary, but at least once each year, for chemical contaminants, and § 129.80(g) requires that each type of bottled water product be analyzed at least annually for chemical contaminants. Moreover, § 129.80(h) requires that records of the results for these tests be maintained at the plant for at least 2 years and be available for official review at reasonable times. FDA is not aware of any data or other information that suggests that requiring all bottlers to test for lead more frequently is necessary to ensure that bottled water is safe and of acceptable quality.

FDA emphasizes that water bottlers are responsible for ensuring, through appropriate manufacturing techniques and sufficient quality control procedures, that all bottled water products introduced or delivered for introduction into interstate commerce are safe, wholesome, and truthfully labeled, and that they comply with the provisions of the quality standard. Therefore, should any bottler encounter circumstances that would warrant testing for lead more frequently than once per year, the bottler is required to do such testing to ensure the safety and quality of the bottled water.

For the reasons stated above, FDA concludes that the testing requirements for contaminants in bottled water contained in the CGMP regulations (part 129) are appropriate and sufficient to ensure the quality and safety of bottled water products. Thus, the agency finds that revision of the CGMP regulations to require more frequent testing for chemical contaminants in bottled water is not necessary at this time.

6. A majority of responses from industry opposed the exemption of mineral water from the lead standard for bottled water. Another comment stated that the lead standard should apply to other types of bottled beverages, including mineral water, soda water, and seltzer.

Under the provisions of § 103.35, the definition of "bottled water" excludes mineral water or any type of soft drink commonly known as soda water. Consequently, these types of products are exempt from the provisions of the quality standard for bottled water, including the allowable level for lead. However, in a proposal to establish a standard of identity for bottled water (57 FR 393, January 5, 1993), FDA proposed to revise the definition for "bottled water" in the quality standard to include mineral water. Should FDA adopt that proposal, the allowable level of 0.005 mg/L for lead will apply to mineral water. Even if the agency does not adopt this change, because of the health concerns raised by lead, the agency is likely to take some action to regulate the level of lead in mineral water.

In regard to soda water and seltzer, FDA considers these types of products to be soft drinks and not bottled water. Consequently, they are not covered by regulations that address bottled water. The agency's reasons for considering these types of products as soft drinks are fully discussed in its proposal to establish an identity standard for bottled water (57 FR 393 at 395). Soft drinks are subject to regulatory action, however, if they contain a level of lead that may render the food injurious to health.

7. One comment from a trade association representing public water supply agencies recommended that FDA review the latest EPA analytical techniques for determining lead and copper with respect to the use of nitric acid digestion and incorporate this procedure as applicable.

In accordance with FDA's responsibilities pursuant to section 410 of the act, FDA consulted with EPA by requesting EPA's review and comment on the proposal to amend the quality standard for lead and copper in bottled water. In response, EPA stated that FDA's regulatory approach for lead and copper in bottled water is consistent with the intent of EPA's NPDWR's for lead and copper and concurred with the analytical methods that FDA cited for determining lead and copper in bottled water (Ref. 4). Furthermore, in EPA Methods 200.7, 200.8, and 200.9, which FDA proposed to incorporate by reference, the sample preparation procedures for measuring lead and copper as total recoverable metals call for a nitric acid or nitric acid-hydrochloric acid digestion.

III. Conclusions

The agency is adopting the provisions concerning lead and copper in the quality standard for bottled water as proposed (58 FR 389, January 5, 1993). The majority of the comments that the agency received supported the proposal. Furthermore, after carefully considering the comments that the agency received that suggested modifications to, or were opposed to, aspects of the proposal, the agency has determined that no changes are warranted. Therefore, upon the effective date of this rule, November 21, 1994, any bottled water that contains an amount of lead or copper that exceeds the allowable levels will be misbranded under section 403(h)(1) of the act unless the bottled water bears a statement of substandard quality as provided by § 103.35(f)(2)(ii).

FDA has made one minor change concerning the analytical methods for the determination of lead and copper cited in new § 103.35(d)(3)(v). The sources for these methods will be the National Technical Information Services rather than EPA. This change is consistent with the agency's practice of relying on readily available commercial sources for incorporated materials when possible.

IV. Environmental Impact

The agency previously considered the environmental effects of this rule, as announced in the proposed rule (58 FR 389, January 5, 1993). At that time, the agency concluded that the action would not have a significant impact on the human environment, and that an environmental impact statement is not required. The agency's environmental assessment and finding of no significant impact for the proposal were displayed at the Dockets Management Branch at the time of the proposal. FDA has received no new information or comments that would affect the agency's previous determination that there is no significant impact on the human environment, and that an environmental impact statement is not required.

V. Analysis of Impacts

FDA has examined the impacts of the final rule under Executive Order 12866 and the Regulatory Flexibility Act (Pub. L. 96–354). Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The agency

believes that this final rule is consistent with the regulatory philosophy and principles identified in the Executive Order. In addition, the final rule is not a significant regulatory action as defined by the Executive Order and so is not subject to review under the Executive Order.

The Regulatory Flexibility Act requires agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because FDA has received no new information or comments that would alter its tentative finding in the proposal that there is no substantive economic issue, the agency certifies that the final rule will not have a significant economic impact on a substantial number of small entities. Therefore, under the Regulatory Flexibility Act, no further analysis is required.

VI. References

The following references have been placed on display in the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857, and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

1. FDA FY 90 Bottle Water Survey, 1990.

2. FDA internal memorandum of meeting, Discussions on the Analytical Methods for Determination of Lead in Bottled Water, December 20, 1991.

3. "Twenty Questions Concerning Bottled Water," International Bottled Water Association, 1990.

4. James M. Conlon, Drinking Water Standards Division, EPA, letter to Henry S. Kim, February 14, 1992.

List of Subjects in 21 CFR Part 103

Beverages, Bottled water, Food grades and standards, Incorporation by reference.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 103 is amended as follows:

PART 103—QUALITY STANDARDS FOR FOODS WITH NO IDENTITY STANDARDS

1. The authority citation for 21 CFR part 103 continues to read as follows:

Authority: Secs. 201, 401, 403, 409, 410, 701, 721 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 341, 343, 348, 349, 371, 379e).

2. Section 103.35 is amended in the table in paragraph (d)(1)(i) by removing the entries for "Copper" and "Lead," by revising the introductory text of paragraph (d)(3), and by adding new paragraphs (d)(3)(i) and (d)(3)(v) to read as follows:

§ 103.35 Bottled water.

* * * * *

(d) * * *

(3) Having consulted with the U.S. Environmental Protection Agency (EPA) as required by section 410 of the Federal Food, Drug, and Cosmetic Act, the Food and Drug Administration has determined that bottled water, when a composite of analytical units of equal volume from a sample is examined by the methods listed in paragraphs (d)(3)(v) and (d)(3)(vi) of this section, shall not contain the following chemical contaminants in excess of the concentrations specified in paragraphs (d)(3)(i) and (d)(3)(ii) of this section.

(i) The allowable levels for inorganic substances are as follows:

Contaminant	Concentration milligrams per liter (or as specified)
Copper	1.0
Lead	0.005

* * * * *

(iii) and (iv) [Reserved]

(v) Analyses to determine compliance with the requirements of paragraph (d)(3)(i) of this section shall be conducted in accordance with an applicable method and applicable revisions to the methods listed in paragraphs (d)(3)(v)(G) and (d)(3)(v)(H) of this section and described, unless otherwise noted, in "Methods for Chemical Analysis of Water and Wastes," U.S. EPA Environmental Monitoring and Support Laboratory, EPA–600/4–79–020, March 1983, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of this publication are available from the National Technical Information Service, U.S. Department of Commerce, 5825 Port Royal Rd., Springfield, VA 22161, or may be examined at the Office of Plant and Dairy Foods and Beverages (HFS–305), Center for Food Safety and Applied Nutrition, Food and Drug Administration, 200 C St. SW., Washington, DC 20204, or at the Office of the Federal Register, 800 North Capitol St., NW., suite 700, Washington, DC.

(A)–(F) [Reserved]

(*G*) Copper shall be measured as total recoverable metal without filtration using the following methods:

(*1*) Method 220.2—Atomic absorption; furnace technique, in "Methods for Chemical Analysis of Water and Wastes," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 or

(*2*) Method 220.1—Atomic absorption; direct aspiration, in "Methods for Chemical Analysis of Water and Wastes," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v) of this section.

(*3*) Method 200.7—entitled "Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Atomic Emission Spectrometry," Revision 3.3, April 1991, U.S. EPA, Environmental Monitoring and Support Laboratory (EMSL). The revision is contained in the manual entitled "Methods for the Determination of Metals in Environmental Samples," Office of Research and Development, Washington, DC 20460, (EPA/600/4–91/010), June 1991, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of this publication are available from the National Technical Information Service, U.S. Department of Commerce, 5825 Port Royal Rd., Springfield, VA 22161, or may be examined at the Office of Plant and Dairy Foods and Beverages (HFS–305), Center for Food Safety and Applied Nutrition, Food and Drug Administration, 200 C St. SW., Washington, DC 20204, or at the Office of the Federal Register, 800 North Capitol St. NW., suite 700, Washington, DC.

(*4*) Method 200.8—entitled, "Determination of Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry," Revision 4.4, April 1991, U.S. EPA, EMSL. The revision is contained in the manual entitled "Methods for the Determination of Metals in Environmental Samples," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v)(G)(*3*) of this section.

(*5*) Method 200.9—entitled, "Determination of Trace Elements by Stabilized Temperature Graphite Furnace Atomic Absorption Spectrometry," Revision 1.2, April 1991, U.S. EPA, EMSL. The revision is contained in the manual entitled "Methods for the Determination of Metals in Environmental Samples," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v)(G)(*3*) of this section.

(*H*) Lead shall be measured as total recoverable metal without filtration using the following methods:

(*1*) Method 239.2—Atomic absorption; furnace technique, from "Methods for Chemical Analysis of Water and Wastes," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v) of this section.

(*2*) Method 200.8—entitled, "Determination of Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry," Revision 4.4, April 1991. The revision is contained in the manual entitled "Methods for the Determination of Metals in Environmental Samples," June 1991, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v)(G)(*3*) of this section.

(*3*) Method 200.9—from "Determination of Trace Elements by Stabilized Temperature Graphite Furnace Atomic Absorption Spectrometry," Revision 1.2, April 1991. The revision is contained in the manual entitled "Methods for the Determination of Metals in Environmental Samples," June 1991, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (d)(3)(v)(G)(*3*) of this section.

* * * * *

Dated: May 17, 1994.

Michael R. Taylor,

Deputy Commissioner for Policy.

[FR Doc. 94–12666 Filed 5–24–94; 8:45 am]

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21 CFR Part 166

[Docket No. 90P–0025]

Margarine; Standard of Identity To Permit Use of Any Form of Oil of Marine Species Affirmed as GRAS or Approved as a Food Additive for This Use

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the U.S. standard of identity for margarine to permit the use of any form of oil of marine species that has been affirmed as generally recognized as safe (GRAS) or approved as a food additive for this use. This action is in response to a petition submitted by the National Fish Meal and Oil Association (NFMOA). FDA believes that this action will provide increased flexibility to manufacturers in the selection of lipid ingredients in margarine and will promote honesty and fair dealing in the interest of consumers.

DATES: Effective July 25, 1994. All products initially introduced or initially delivered for introduction into interstate commerce shall comply on or after this date.

FOR FURTHER INFORMATION CONTACT: Nannie H. Rainey, Center for Food Safety and Applied Nutrition (HFS–158), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–205–5099.

SUPPLEMENTARY INFORMATION:

I. The Proposal

In the **Federal Register** of August 30, 1990 (55 FR 35439), FDA published a proposal based on a petition from NFMOA, 1525 Wilson Blvd., suite 500, Arlington, VA 22209, to amend the U.S. standard of identity for margarine (§ 166.110 (21 CFR 166.110)) to permit the use of any form of marine oil that has been affirmed as GRAS or approved as a food additive for this use as an additional optional edible fat or oil ingredient in margarine. Interested persons were given until October 29, 1990, to submit comments.

II. The Tentative Final Rule

The NFMOA petition was filed under section 701(e) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 371(e)), which requires formal rulemaking in any action for the amendment of a food standard. However, in November 1990, the Nutrition Labeling and Education Act of 1990 (Pub. L. 101–535) was signed into law, and it removed food standard rulemaking proceedings, except for actions for the amendment or repeal of food standards of identity for dairy products or maple sirup, from the formal rulemaking proceedings of section 701(e) of the act. Therefore, further action on the NFMOA petition would be subject to the informal notice and comment rulemaking proceedings of section 701(a) of the act. Thus, the agency published a tentative final rule in the **Federal Register** of August 17, 1993 (58 FR 43580), under those procedures. Because there had been an opportunity to comment on the proposal when it was published in 1990, the comment period on that tentative final rule was 30 days.

III. Comments

FDA received one comment in response to the tentative final rule. This comment, submitted by the petitioner, expressed support for the rule and urged the agency to finalize the rule as soon as possible. NFMOA also stated that it would like to make clear for the record that its petition did not ask FDA to approve the use of any form of marine oil but was instead restricted to "any safe and suitable form of menhaden oil." The comment stated that, nevertheless, it had no objection to FDA's enlargement of the range of oils to be permitted by the amended regulation, from menhaden oil to marine oil, provided that this change does not result in any further delay in the rulemaking proceeding.

The agency acknowledges that the petitioner only sought to provide for safe and suitable forms of menhaden oil in margarine. However, FDA believes that it is appropriate to provide for oil of any marine species where such oil has been affirmed as GRAS or approved as a food additive for this use. The broader provision in the standard of identity will eliminate the need to amend the standard of identity for margarine should other oils of marine species be found to be safe and suitable for use in this food. FDA also notes that ingredient labeling will inform consumers of the presence of such oils when used in margarine.

Therefore, having received no adverse comments, the agency is revising the margarine standard as proposed in the tentative final rule. The agency believes that providing for optional oils of marine species that have been affirmed as GRAS or listed as a food additive for this use will increase manufacturers' options in the selection of oil ingredients for margarine and will provide for a wider variety of margarine products in the marketplace. Thus, the agency concludes that the proposed change in the standard of identity for margarine will promote honesty and fair dealing in the interest of consumers.

Accordingly, after consideration of the comments, the agency is issuing this final rule to amend the standard of identity for margarine in § 166.110 as set forth below.

IV. Economic Impact

FDA has examined the economic implications of this final rule to amend the standard of identity for margarine in 21 CFR part 166 as required by Executive Order (E.O.) 12866 and the Regulatory Flexibility Act (Pub. L. 96–354). E.O. 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential

economic, environmental, public health, and safety effects, distributive impacts, and equity). The Regulatory Flexibility Act requires that the agency analyze options for regulatory relief for small businesses.

In the August 17, 1993, tentative final rule, FDA announced that it had analyzed the economic impact of the new provision that FDA is adopting under the previous E.O. 12291 and found that it would not have a significant impact. E.O. 12291 compelled agencies to use cost-benefit analysis as a component of decisionmaking. The agency also tentatively concluded in the August 30, 1990, proposal that this action would not result in a significant economic impact on a substantial number of small entities. Manufacturers may continue to produce margarine using current formulations. Thus, no changes are required in formulations unless manufacturers wish to reformulate their products. FDA has received no new information or comments that would alter its tentative finding that there is no substantive economic issue in this rulemaking. Thus, FDA concludes that this is not a major rule as defined by E.O. 12291, nor is it a significant rule as defined by E.O. 12866. In compliance with the Regulatory Flexibility Act, the agency certifies that the final rule will not have a significant impact on a substantial number of small businesses.

V. Environmental Impact

In the preamble to the August 30, 1990, proposed rule, FDA reported its finding that this action qualified for categorical exclusion under 21 CFR 25.24(b)(1) and that neither an environmental assessment (EA) nor an environmental impact statement was required. As noted in the tentative final rule, FDA received one comment on the proposed rule that claimed that this action would result in increased fishing pressure that could adversely affect the menhaden fishery, and that the agency had not considered this potential impact prior to issuing the proposed rule. Although the comment did not provide evidence to support the contention that the menhaden fishery would be adversely affected, FDA requested an EA from the petitioner. The decision to ask for an EA takes into consideration the agency's assessment of this issue as part of its previous action to affirm partially hydrogenated menhaden oil and hydrogenated menhaden oil as GRAS for use as edible fats or oils (54 FR 38219, September 15, 1989). The agency also has information indicating that the market for menhaden oil as a component of margarine is large, approximately 40 million pounds per year.

Based on information in the petitioner's EA submitted for the current action and on the agency's analysis of the reports on the menhaden fisheries issued subsequent to FDA approval of GRAS petition (GRASP 6G0316 (54 FR 38219)), FDA concluded in the August 17, 1993, tentative final rule that the proposed action would not have a significant impact on the menhaden fishery. Amending the margarine standard of identity will not increase the volume of crude menhaden oil that is produced. The only change will be that crude menhaden oil will more often be retained in the United States for further processing into food grade products, instead of being shipped to Europe and elsewhere for this same use.

Thus, FDA carefully considered the potential environmental effects of this action, including the effects on the menhaden fishery and concluded that the action will not have a significant impact on the human environment, and that an environmental impact statement is not required. The agency's finding of no significant impact, and the evidence supporting that finding, which includes the petitioner's EA, the finding of no significant impact for FDA's approval of GRASP 6G0316 (54 FR 38219), and a copy of "National Marine Fisheries Service Final Purse-seine Landings of Gulf and Atlantic Menhaden in the 1990 and 1991 Fishing Seasons" have been placed on file in the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857, and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

The agency has not received any additional information that would cause it to revise its finding of no significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

List of Subjects in 21 CFR Part 166

Food grades and standards, Food labeling, Margarine.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 166 is amended as follows:

PART 166—MARGARINE

1. The authority citation for 21 CFR part 166 is revised to read as follows:

Authority: Secs. 201, 401, 403, 407, 409, 701, 721 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 341, 343, 347, 348, 371, 379e).

2. Section 166.110 is amended by adding new headings for the introductory text of paragraph (a) and paragraph (c), by revising paragraph (a)(1), and in the introductory text of paragraph (b) and paragraph (d) the headings "Optional ingredients" and "Label declaration", respectively, are italicized to read as follows:

§ 166.110 Margarine.

(a) *Description.* * * *

(1) Edible fats and/or oils, or mixtures of these, whose origin is vegetable or rendered animal carcass fats, or any form of oil from a marine species that has been affirmed as GRAS or listed as a food additive for this use, any or all of which may have been subjected to an accepted process of physico-chemical modification. They may contain small amounts of other lipids, such as phosphatides or unsaponifiable constituents, and of free fatty acids naturally present in the fat or oil.

* * * * *

(b) *Optional ingredients.* * * *

* * * * *

(c) *Nomenclature.* * * *

(d) *Label declaration.* * * *

Dated: May 16, 1994.

Michael R. Taylor,

Deputy Commissioner for Policy.

[FR Doc. 94–12804 Filed 5–24–94; 8:45 am]

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21 CFR Part 442

[Docket No. 94N–0132]

Antibiotic Drugs; Cefotetan and Cefotetan Sodium Injection

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the antibiotic drug regulations to provide for the inclusion of accepted standards for a new bulk form of cefotetan, cefotetan, and for its use in a new dosage form of cefotetan sodium, cefotetan sodium injection. The manufacturer has supplied sufficient data and information to establish its safety and efficacy.

DATES: Effective June 24, 1994; written comments, notice of participation, and requests for a hearing by June 24, 1994; data, information, and analyses to justify a hearing by July 25, 1994.

ADDRESSES: Submit written comments to the Dockets Management Branch

(HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Peter A. Dionne, Center for Drug Evaluation and Research (HFD–520), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–0335.

SUPPLEMENTARY INFORMATION: FDA has evaluated data submitted in accordance with regulations promulgated under section 507 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 357), as amended, with respect to a request for approval of (1) a new bulk form of cefotetan, cefotetan, and (2) for its use in a new dosage form of cefotetan sodium, cefotetan sodium injection. The agency has concluded that the data supplied by the manufacturer concerning this antibiotic drug are adequate to establish its safety and efficacy when used as directed in the labeling and that the regulations should be amended in 21 CFR part 442 to provide for the inclusion of accepted standards for this product.

Environmental Impact

The agency has determined under 21 CFR 25.24(c)(6) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

Submitting Comments and Filing Objections

This final rule announces standards that FDA has accepted in a request for approval of an antibiotic drug. Because this final rule is not controversial and because, when effective, it provides notice of accepted standards, FDA finds that notice and comment procedure is unnecessary and not in the public interest. This final rule, therefore, is effective June 24, 1994. However, interested persons may, on or before June 24, 1994, submit written comments to the Dockets Management Branch (address above). Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Any person who will be adversely affected by this final rule may file objections to it and request a hearing. Reasonable grounds for the hearing must be shown. Any person who decides to seek a hearing must file (1) on or before June 24, 1994, a written notice of participation and request for a hearing, and (2) on or before July 25, 1994, the data, information, and analyses on which the person relies to justify a hearing, as specified in 21 CFR 314.300. A request for a hearing may not rest upon mere allegations or denials, but must set forth specific facts showing that there is a genuine and substantial issue of fact that requires a hearing. If it conclusively appears from the face of the data, information, and factual analyses in the request for a hearing that no genuine and substantial issue of fact precludes the action taken by this order, or if a request for a hearing is not made in the required format or with the required analyses, the Commissioner of Food and Drugs will enter summary judgment against the person(s) who request(s) the hearing, making findings and conclusions and denying a hearing. All submissions must be filed in three copies, identified with the docket number appearing in the heading of this document and filed with the Dockets Management Branch.

The procedures and requirements governing this order, a notice of participation and request for a hearing, a submission of data, information, and analyses to justify a hearing, other comments, and grant or denial of a hearing are contained in 21 CFR 314.300.

All submissions under this order, except for data and information prohibited from public disclosure under 21 U.S.C. 331(j) or 18 U.S.C. 1905, may be seen in the Dockets Management Branch (address above) between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 442

Antibiotics.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 442 is amended as follows:

PART 442—CEPHA ANTIBIOTIC DRUGS

1. The authority citation for 21 CFR part 442 continues to read as follows:

Authority: Sec. 507 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 357).

2. New § 442.52 is added to subpart A to read as follows:

§ 442.52 Cefotetan.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Cefotetan is (6*R*,7*S*)-4-[[2-carboxy-7-methoxy-3-[[(1-methyl-1*H*-tetrazol-5-yl)thio]methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-7-yl]-carbamoyl]-1,3-dithietane-$\Delta^{2,\alpha}$-malonamic acid. It is so purified and dried that:

(i) Its potency is not less than 950 micrograms and not more than 1,030 micrograms of cefotetan activity per milligram on the anhydrous basis.

(ii) Its moisture content is not more than 2.5 percent.

(iii) It gives a positive identity test for cefotetan.

(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 the batch for potency, moisture, and identity.

(ii) Samples, if required by the Director, Center for Drug Evaluation and Research: 10 packages each containing approximately 500 milligrams.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 436.216 of this chapter, except use the resolution test solution to determine resolution in lieu of the working standard solution. Perform the assay at ambient temperature, using an ultraviolet detection system operating at a wavelength of 254 nanometers, a column packed with microparticulate (3 to 10 micrometers in diameter) reversed phase packing material such as octadecyl hydrocarbon bonded silicas, a flow rate not exceeding 2.0 milliliters per minute, and a known injection volume of between 10 and 20 microliters. Reagents, working standard solution, sample solution, resolution test solution, system suitability requirements, and calculations are as follows:

(i) *Reagents*—(A) *Diluting solution.* Mix water:methanol:acetonitrile (90:5:5).

(B) *Mobile phase.* Mix 0.1*M* phosphoric acid:glacial acetic acid:methanol:acetonitrile (1700:100:105:105). Filter through a suitable filter capable of removing particulate matter greater than 0.5 micron in diameter. Degas the mobile phase just prior to its introduction into the chromatograph.

(ii) *Preparation of working standard, sample, and resolution test solutions*—(A) *Working standard solution.* Accurately weigh approximately 50 milligrams of the cefotetan working standard into a 250-milliliter volumetric flask containing 12.5 milliliters of methanol. Swirl the flask for several minutes, then add 12.5 milliliters of acetonitrile. Swirl the flask until the cefotetan is dissolved. Dilute to volume

with water to obtain a solution containing approximately 200 micrograms of cefotetan per milliliter. Mix well. Protect the working standard solution from light.

(B) *Sample solution.* Dissolve an accurately weighed portion of the sample with sufficient diluting solution described in paragraph (b)(1)(i)(A) of this section to obtain a concentration of approximately 200 micrograms of cefotetan per milliliter.

(C) *Resolution test solution.* Place 10 milliliters of the working standard solution in a stoppered flask containing a few milligrams of magnesium carbonate. Close the flask and sonicate for 10 minutes. If the solution is not slightly turbid, add more magnesium carbonate and repeat sonication. Filter the turbid solution through a 0.5-micron filter and use within 2 hours. As this solution stands, the tautomer concentration increases.

(iii) *System suitability requirements*—(A) *Tailing factor.* The tailing factor (T) is satisfactory if it is not more than 1.3 at 10 percent of peak height in lieu of 5 percent of peak height.

(B) *Efficiency of the column.* The efficiency of the column (n) is satisfactory if it is greater than 1,500 theoretical plates.

(C) *Resolution.* The resolution (R) between the peak for cefotetan and its tautomer is satisfactory if it is not less than 2.0.

(D) *Coefficient of variation.* The coefficient of variation (S_r in percent) of five replicate injections is satisfactory if it is not more than 2.0 percent. If the system suitability requirements have been met, then proceed as described in § 436.216(b) of this chapter. Alternate chromatographic conditions are acceptable provided comparable system suitability requirements are met. However, the sample preparation described in paragraph (b)(1)(ii)(B) of this section should not be changed.

(iv) *Calculation.* Calculate the micrograms of cefotetan per milligram of sample as follows:

$$\text{Micrograms of cefotetan per milligram} = \frac{A_U \times P_S \times 100}{A_S \times C_U \times (100-m)}$$

where:

A_U = Area of the cefotetan peak in the chromatogram of the sample (at a retention time equal to that observed for the standard);

A_S = Area of the cefotetan peak in the chromatogram of the cefotetan working standard;

P_S = Cefotetan activity in the cefotetan working standard solution in micrograms per milliliter;

C_U = Milligrams of sample per milliliter of sample solution; and

m = Percent moisture content of the sample.

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

(3) *Identity.* Proceed as directed in § 436.211 of this chapter using a mineral oil mull prepared as described in § 436.211(b)(2).

§ 442.253a [Redesignated from § 442.253]

3. Section 442.253 is redesignated as § 442.253a and new §§ 442.253 and 442.253b are added to subpart C to read as follows:

§ 442.253 Cefotetan injectable dosage forms.

§ 442.253b Cefotetan sodium injection.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Cefotetan sodium injection is a frozen, aqueous, iso-osmotic solution of cefotetan and sodium bicarbonate. It contains one or more suitable and harmless buffer substances and a tonicity adjusting agent. Each milliliter contains cefotetan disodium equivalent to 20 milligrams or 40 milligrams of cefotetan per milliliter. Its cefotetan content is satisfactory if it is not less than 90 percent and not more than 120 percent of the number of milligrams of cefotetan that it is represented to contain. It is sterile. It contains not more than 0.17 endotoxin units per milligram of cefotetan. Its pH is not less than 4.0 and not more than 6.5. It passes the identity test. The cefotetan used conforms to the standards prescribed by § 442.52(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 cefotetan used in making the batch for cefotetan potency, moisture, and identity.

(B) The batch for cefotetan potency, sterility, bacterial endotoxins, pH, and identity.

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

(A) The cefotetan used in making the batch: 10 packages, each containing approximately 500 milligrams.

(B) The batch:

(*1*) For all tests except sterility: A minimum of 12 immediate containers.

(*2*) For sterility testing: 20 immediate containers, collected at regular intervals throughout each filling operation.

(b) *Tests and methods of assay.* Thaw the sample as directed in the labeling. The sample solution used for testing must be at room temperature.

(1) *Cefotetan potency.* Proceed as directed in § 442.52(b)(1), except prepare the sample solution and calculate the cefotetan content as follows:

(i) *Preparation of sample solution.* Using a suitable hypodermic needle and syringe, remove an accurately measured portion from each container immediately after thawing and reaching room temperature and dilute with mobile phase to obtain a solution containing 200 micrograms of cefotetan per milliliter (estimated). Prepare the sample solution just prior to its introduction into the chromatograph.

(ii) *Calculation.* Calculate the milligrams of cefotetan per milliliter of sample as follows:

$$\text{Micrograms of cefotetan per milligram} = \frac{A_U \times P_S \times 100}{A_S \times C_U \times (100-m)}$$

where:

A_U = Area of the cefotetan peak in the chromatogram of the sample (at a retention time equal to that observed for the standard);

A_S = Area of the cefotetan peak in the chromatogram of the cefotetan working standard;

P_S = Cefotetan activity in the cefotetan working standard solution in micrograms per milliliter;

C_U = Milligrams of sample per milliliter of sample solution; and

m = Percent moisture content of the sample.

(2) *Sterility.* Proceed as directed in § 436.20 of this chapter, using the method described in paragraph (e)(1) of that section.

(3) *Bacterial endotoxins.* Proceed as directed in the U.S. Pharmacopeia bacterial endotoxins test.

(4) *pH.* Proceed as directed in § 436.202 of this chapter, using the undiluted solution.

(5) *Identity.* The high-performance liquid chromatogram of the sample determined as directed in paragraph (b)(1) of this section compares qualitatively to that of the cefotetan working standard.

Dated: May 17, 1994.

Gayle R. Dolecek,

Acting Director, Office of Compliance, Center for Drug Evaluation and Research.

[FR Doc. 94–12667 Filed 5–24–94; 8:45 am]

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