

Labeling <7>

Type of PostingRevision BulletinPosting Date30-Aug-2019Official Date01-Sep-2019

Expert Committee Nomenclature and Labeling

Reason for Revision Compliance

In accordance with the Rules and Procedures of the 2015–2020 Council of Experts, the Nomenclature and Labeling Expert Committee is issuing this Revision Bulletin related to *Labeling <7>* to address potential compliance issues resulting from the postponement of the *Expiration Date and Beyond-Use Date* section of the chapter. This Revision Bulletin clarifies that the *Expiration Date and Beyond-Use Date* section of General Chapter <7> that was official prior to May 1, 2019, is still official text in light of the postponement of revisions to this section.

General chapter <7> has undergone several recent revisions, namely:

- Publication of an in-process revision as final approved text in USP 42–NF 37
- Issuance of a publication correction (see https://www.uspnf.com/notices/gc-7-pubs-correction for details)
- Revision Bulletin postponing the Expiration Date and Beyond-Use Date section of the chapter pending further stakeholder input and revision, official on May 1, 2019 (see https://www.uspnf.com/sites/default/files/usp_pdf/EN/USPNF/revisions/gc-7-labeling-rb-notice-20190501.pdf for details)

The Expiration Date and Beyond-Use Date section of <7> was postponed to facilitate further stakeholder engagement related to implementation challenges associated with the new requirement of a 4-digit year format for expiration dates.

It was the intent of the Nomenclature and Labeling Expert Committee that the *Expiration Date and Beyond-Use Date* section of <7> that was official prior to May 1, 2019, remain official pending further revision of this section, upon issuance of the postponement. It is critical that this text remain official in the interim, as it addresses several key compliance-related topics, including:

- 1. Clearly describing the display of label text
- 2. Providing examples for expiration dates
- 3. Detailing how stakeholders should label products in the absence of an individual monograph requirement for labeling
- 4. Providing for a 1-year beyond-use date for unit-dose (hospital) repackaged items, which has been in existence for many years

Since issuing the postponement of the *Expiration Date and Beyond-Use Date* section of <7>, USP has received questions and comments that indicate confusion regarding the status of the currently official text. This Revision Bulletin is being issued to clarify that the *Expiration Date and Beyond-Use Date* section of <7> that was official prior to May 1, 2019, is still official text in light of the postponement of revisions to this section.

Future revisions to *Expiration Date and Beyond-Use Date* based on additional stakeholder engagement will be published as a proposed Interim Revision Announcement (IRA) in the *Pharmacopeial Forum* at a later date.

For any additional questions, please contact Misti Spann, Scientific Liaison (301-816-8585 or nomenclatureSL@usp.org).

$\langle 7 \rangle$ LABELING

INTRODUCTION

This general chapter provides definitions and standards for labeling of official articles. Labeling standards for an article recognized in *USP–NF* are expressed in the article's monograph and applicable general chapters. It is intended that all articles in *USP* or *NF* will be subject to the labeling requirements specified in this chapter by means of a provision in *General Notices*, 10 Preservation, Packaging, Storage, and Labeling, unless different requirements are provided in a specific monograph. As with compendial standards for naming, identity, strength, quality, and purity, compendial requirements for labeling have a role in the adulteration and misbranding provisions of federal law [see the Federal Food, Drug, and Cosmetic Act (FDCA) sections 501(b), 502(e)(3)(b), 502(g), and 502(h)]. Exceptions or additional requirements specific to animal drug products and compounded preparations are provided in separate sections. Vaccine labeling is not included in this general chapter.

DEFINITIONS

The term "labeling" includes all labels and other written, printed, or graphic matter on an article's immediate container or on, or in, any package or wrapper in which it is enclosed, except any outer shipping container. The term "label" is that part of the labeling on the immediate container.

A shipping container that contains a single article, unless the container also is essentially the immediate container or the outside of the consumer package, must be labeled with a minimum of product identification (except for controlled substances), lot number, expiration date, and conditions for storage and distribution.

Beyond-use dates (BUDs) and expiration dates are not the same. An expiration date identifies the time during which a conventionally manufactured product, active ingredient, or excipient can be expected to meet the requirements of a compendial monograph, if one exists, provided it is kept under the prescribed storage conditions. The expiration date limits the time during which the conventionally manufactured product, active pharmaceutical ingredient (API), or excipient may be dispensed or used. Expiration dates are assigned by manufacturers of conventionally manufactured products based on analytical and performance testing of the sterility, chemical and physical stability, and packaging integrity of the product. Expiration dates are specific for a particular formulation in its container and at stated exposure conditions of illumination and temperature.

The beyond-use date (BUD) is the date or time beyond which a compounded preparation must be discarded. The date or time is determined from the date the preparation was compounded.

LABELS AND LABELING FOR DRUG PRODUCTS AND COMPOUNDED PREPARATIONS EXPRESSED AS ACTIVE MOIETY IN NAME AND STRENGTH

The names and strengths of drug products and compounded preparations formulated with a salt of an acid or base are to be expressed in terms of the active moiety on the label (see *Nomenclature* (1121), *Monograph Naming Policy for Salt Drug Substances in Drug Products and Compounded Preparations*).

Labeling

The labeling clearly states the specific salt form of the active moiety that is present in the product or preparation because this information may be useful to practitioners and patients. The names and strengths of both the active moiety and specific salt form (when applicable) are provided in the labeling.

Exceptions

In rare cases in which the use of the specific salt form of the active moiety in the title provides vital information from a clinical perspective, an exception to this policy may be considered. In such cases, when the monograph title contains the specific salt form of the active moiety, the strength of the product or preparation is also expressed in terms of the specific salt form.

LABELS AND LABELING FOR INJECTABLE PRODUCTS

The labels¹ and the labeling state the following information:

- Name of the product
 - o In the case of a liquid, the quantity or proportion of each active moiety or drug substance in a specified volume
 - In the case of any product to which a diluent must be added before use, the quantity or proportion of each active
 moiety or drug substance, name and volume of diluent to be added, the concentration after the diluent is added,
 directions for proper storage of the constituted solution, and a BUD (see Expiration Date and Beyond-Use Date)
- Route(s) of administration

¹ If there are space limitations, see 21 CFR§ 201.10(i), 21 CFR§ 201.105(b), 21 CFR§ 610.60.

- Name and quantity or proportion of all inactive ingredients except ingredients added to adjust the pH or to make the drug isotonic may be declared by name with a statement of their effect; if the vehicle is *Water for Injection* it need not be named
- Statement of storage conditions
- Name and place of business of the manufacturer, packer, or distributor
- Identifying lot number and expiration date
- "Rx only" for human drugs
- The recommended or usual dosage.

The container must be labeled so that a sufficient area of the container remains uncovered for its full length or circumference to permit inspection of the contents.

The lot number must be traceable to the complete manufacturing history of the specific package, including all manufacturing, filling, sterilizing, and labeling operations.

If the individual monograph permits varying concentrations of active moiety or drug substance in a large-volume injection (LVI), the concentration of each active moiety or drug substance named in the official title is stated as if it were part of the official title (e.g., 5% Dextrose Injection, or Dextrose Injection 5%, or 5% Dextrose and 0.2% Sodium Chloride Injectionor Dextrose (5%) and Sodium Chloride (0.2%) Injection).

Quantity and Total Volume for Injectable Drug Products Packaged in Single- and Multiple-Dose Containers

For injectable drug products greater than 1 mL, whether packaged in single- or multiple-dose containers, the quantity per total volume should be the primary and prominent expression on the principal display panel of the label, followed in close proximity by quantity per milliliter enclosed by parentheses (quantity/mL).

For containers that hold a volume of less than 1 mL, the quantity per fraction of a milliliter should be the only expression

For containers that hold a volume of less than 1 mL, the quantity per fraction of a milliliter should be the only expression of strength. For containers that hold a volume equal to 1 mL, the strength should be expressed as quantity per milliliter (quantity/mL), not quantity/1 mL.

The following example formats are acceptable:

- 1. For containers less than 1 mL: 12.5 mg/0.625 mL
- 2. For containers equal to 1 mL: 5 mg/mL (not 5 mg/1 mL)
- 3. For containers greater than 1 mL:

Example 1: 500 mg/10 mL (50 mg/mL)

25 000 Units/5 ml

Example 2: 25,000 Units/5 mL (5,000 Units/mL)

In certain cases, the primary and prominent expression of the total drug content per container is not effective in preventing medication errors and therefore in those cases, the total drug content per container should not be the primary and prominent expression of strength. Insulin products are an example of a product class that is an exception from the total drug content per container requirement. Another exception to expressing strength as quantity per total volume is lidocaine (or similar drugs for local anesthesia) where the product may be ordered and administered by percentage (e.g., 1% or 2%). In such cases, the percentage strength as well as the quantity per total volume followed in close proximity by quantity per milliliter enclosed by parentheses must be used.

Example 1: 1%

(100 mg/10 mL) (10 mg/mL)

Example 2: 2%

(1000 mg/50 mL) (20 mg/mL)

Dry solids that must be constituted should follow the same format with the exception that only the quantity of the drug in the container should be listed as the primary expression of strength, not the quantity per total volume or quantity per milliliter (quantity/mL).

Example: 500 mg/vial

Ratio Expression of Strength

Single-entity injectable drug products must be labeled in terms of quantity per milliliter (quantity/mL) and not as a ratio expression.

Examples:

Epinephrine Injection, 1:1000 must be expressed as 1 mg/mL.

Epinephrine Injection, 1:10,000 must be expressed as 0.1 mg/mL.

Isoproterenol Hydrochloride Injection, 1:5000 must be expressed as 0.2 mg/mL.

Neostigmine Methylsulfate Injection, 1:1000 must be expressed as 1 mg/mL.

Single-entity injectable drug products greater than 1 mL should be formatted as quantity per total volume on the principal display panel of the label followed in close proximity by quantity per milliliter (quantity/mL) enclosed by parentheses.

When combined with a local anesthetic, the concentration of epinephrine will be expressed as a ratio.

Examples:

Lidocaine Hydrochloride and Epinephrine Injection 1%/1:100,000

or

Lidocaine Hydrochloride 1%

and

Epinephrine Injection 1:100,000

Pharmacy Bulk Package

Where a container is offered as a Pharmacy Bulk Package, the label must: 1) state prominently "Pharmacy Bulk Package—Not for Direct Infusion"; 2) contain or refer to information on proper techniques to help assure safe use of the product; and 3) bear a statement limiting the time frame in which the container may be used once it has been entered, provided it is held under labeled storage conditions (see *Packaging and Storage Requirements* (659)).

Imaging Bulk Package

Where a container is offered as an Imaging Bulk Package, the label must: 1) state prominently "Imaging Bulk Package" and, in juxtaposition with this statement, include the following use statement: "For use only with an automated contrast injection system, contrast management system, or contrast media transfer set approved or cleared for use with this contrast agent in this Imaging Bulk Package"; 2) bear a statement limiting the time frame in which the container may be used once it has been entered, provided it is held under the labeled storage conditions; 3) bear the statement "See drug and device labeling for information on devices indicated for use with this Imaging Bulk Package and techniques to help assure safe use." (See (659).)

Ferrules and Cap Overseals

Healthcare practitioners using injectable products must be able to easily see and act on labeling statements that convey important safety messages critical for the prevention of imminent life-threatening situations. These cautionary labeling statements must be simple, concise, and devoid of nonessential information. Products that do not require cautionary statements should be free of information, so that those with cautionary statements are immediately apparent. Accomplishing this requires a systematic approach to the labeling of injectable products, and one that ensures that the ferrule and cap overseal—an area of these products that is highly visible to practitioners as they use these medicines—is reserved for critical safety messages. Accordingly:

- 1. Only cautionary statements may appear on the top (circle) surface of the ferrule and cap overseal of a vial containing an injectable product. The cautionary statement should appear on both the ferrule and cap, but may appear solely on the ferrule if the cap overseal is transparent and the cautionary statement beneath the cap is readily legible. A cautionary statement is one intended to prevent an imminent life-threatening situation and may include instructional statements that provide potency or other safety-related instructions if warranted. Examples of such statements include, but are not limited to: "Warning—Paralyzing Agent" and "Dilute before Using". The cautionary statement should be printed in a contrasting color and should be clearly visible under ordinary conditions of use.
- 2. If no cautionary statement is necessary, the top surface of the vial, including the ferrule and cap overseal, must remain blank.
- 3. Other statements or features including, but not limited to, identifying numbers or letters, such as code numbers, lot numbers, company names, logos, or product names, etc., may appear on the side (skirt) surface of the ferrule on vials containing injectable products, but not on the top (circle) surface of the ferrule or cap overseal. The appearance of such statements or features on the skirt surface of the ferrule should not detract from, or interfere with, the cautionary statement on the top surface.

Potassium Chloride for Injection Concentrate

The use of a black closure system on a vial (e.g., a black cap overseal and a black ferrule to hold the elastomeric closure) or the use of a black band or series of bands above the constriction on an ampule is prohibited, except for Potassium Chloride for Injection Concentrate (see (659)).

Neuromuscular Blocking and Paralyzing Agents

All injectable neuromuscular blocking agents and paralyzing agents must be packaged in vials with a cautionary statement printed on the ferrules and cap overseals. Both the container cap ferrule and the cap overseal must bear in black or white print (whichever provides the greatest color contrast with the ferrule or cap color) the words: "Warning: Paralyzing Agent" or "Paralyzing Agent" (depending on the size of the closure system). Alternatively, the overseal may be transparent and without words, allowing for visualization of the warning labeling on the closure ferrule.

Aluminum in Large-Volume Injections (LVIs), Small-Volume Injections (SVIs), and Pharmacy Bulk Packages (PBPs) Used in Parenteral Nutrition (PN) Therapy²

- 1. The aluminum content of LVIs used in PN therapy must not exceed 25 mcg/L.
- 2. The package insert of LVIs used in PN therapy must state that the drug product contains no more than 25 mcg of aluminum per liter. This information must be contained in the *Precautions* section of the labeling of all LVIs used in PN therapy.
- 3. If the maximum amount of aluminum in SVIs and PBPs is 25 mcg/L or less, instead of stating the exact amount of aluminum that each contains, as in paragraph (4), the immediate container label for SVIs and PBPs used in the preparation of PN admixtures or formulations (with exceptions as noted below) may state: "Contains no more than 25 mcg/L of aluminum." If the SVI or PBP is a lyophilized powder, the immediate container label may state the following: "When reconstituted in accordance with the package insert instructions, the concentration of aluminum will be no more than 25 mcg/L."
- 4. The maximum level of aluminum at expiry must be stated on the immediate container label of all SVIs and PBPs used in the preparation of PN admixtures or formulations. The aluminum content must be stated as follows: "Contains no more than ___ mcg/L of aluminum." The immediate container label of all SVIs and PBPs that are lyophilized powders used in the preparation of PN solutions must contain the following statement: "When reconstituted in accordance with the package insert instructions, the concentration of aluminum will be no more than ___ mcg/L." This maximum amount of aluminum must be stated as the highest one of the following three levels:
 - The highest level for the batches produced during the past 3 years
 - The highest level for the latest 5 batches
 - The maximum level in terms of historical levels, but only until completion of production of the first 5 batches.

The package insert for all LVIs, SVIs, and PBPs used in the preparation of PN admixtures or formulations must contain the following statement in the *Warnings* section of the labeling:

WARNING: This product contains aluminum that may be toxic. Aluminum may reach toxic levels with prolonged parenteral administration if kidney function is impaired. Premature neonates are particularly at risk because their kidneys are immature, and they require large amounts of calcium and phosphate solutions, which contain aluminum. Research indicates that patients with impaired kidney function, including premature neonates, who receive parenteral levels of aluminum at greater than 4 to 5 mcg/kg/day, accumulate aluminum at levels associated with central nervous system and bone toxicity. Tissue loading may occur at even lower rates of administration.

Change to read:

LABELS AND LABELING FOR PRODUCTS IN OTHER CATEGORIES

Labels and Labeling of Liquids and Constituted Products

The labels¹ and labeling state the following information:

- 1. In the case of a liquid product, the percentage content of each active moiety or drug substance or the amount of each active moiety or drug substance in a specified volume.
- 2. In the case of a product to which a diluent must be added before use, the amount of each active moiety or drug substance, the name and volume of diluent to be added, the final volume of solution, the concentration after the diluent is added (e.g., quantity/mL or quantity/5 mL), directions for proper storage of the constituted solution, and an expiration or BUD (see *Expiration Date and Beyond-Use Date*).

Amount of Active Moiety or Drug Substance per Dosage Unit

The strength of a drug product is expressed on the container label in terms of micrograms, milligrams, grams, or percentage of the therapeutically active moiety or drug substance, whichever form is used in the title, unless otherwise indicated in an individual monograph. Both the active moiety and drug substance names and their equivalent amounts are then provided on the container label and in the labeling (see *Nomenclature* (1121), *Monograph Naming Policy for Salt Drug Substances in Drug Products and Compounded Preparations*).

Official articles in capsule, tablet, or other dosage forms must be labeled to express the quantity of each active moiety or drug substance contained in each unit. Unit-dose oral solutions or suspensions (whether supplied as liquid products or as liquid products that are constituted from solids upon addition of a designated volume of a specific diluent) must be labeled to express the quantity of each active moiety or drug substance delivered under the conditions prescribed in *Deliverable Volume* (698). Official drug products not in unit-dose packaging must be labeled to show the quantity of each active moiety or drug substance in each milliliter or in each gram, or to express the percentage of each such ingredient (see *General Notices*, 8.140 Percentage Concentrations). Exceptions are oral liquids or solids intended to be constituted to yield oral liquids that, alternatively, can be labeled in terms of each 5-mL portion of the liquid or resulting liquid. Unless otherwise required by regulation [e.g., over-the-counter (OTC) regulation 21 CFR §201.62(b)] or indicated in a monograph or chapter, declarations of strength or quantity must be stated only in metric units [see also *General Notices*, 5.50.10 Units of Potency (Biological)].

² See 21 CFR §201.323. USP uses the following terms: large-volume injections (LVIs), small-volume injections (SVIs), and parenteral nutrition (PN), rather than terminology used in 21 CFR §201.323: large-volume parenterals, small-volume parenterals, and total parenteral nutrition.

▲Expiration Date and Beyond-Use Date

The label of an official drug product or nutritional or dietary supplement product shall bear an expiration date. All products shall display the expiration date so that it can be read by an ordinary individual under customary conditions of purchase and use. The expiration date shall be prominently displayed in high contrast to the background or it shall be sharply embossed, and easily understood (e.g., "EXP 6/13," "Exp. June 13," or "Expires 6/2013").

[NOTE—For additional information and guidance, refer to the Consumer Products Association's Voluntary Codes and Guidelines of the Consumer Healthcare Products Industry.]

The monographs for some preparations state how the labeled expiration date shall be determined. In the absence of a specific requirement in the individual monograph for a drug product or nutritional supplement, the label shall bear an expiration date assigned for the particular formulation and package of the product, with the following exceptions: the label need not show an expiration date if the drug product or nutritional supplement is packaged in a container that is intended for sale without prescription, and the labeling states no dosage limitations, and if the product or supplement is stable for NLT 3 years when stored under the prescribed conditions.

If an official product is required to bear an expiration date, the product shall be dispensed solely in or from a container labeled with an expiration date, and the date on which the article is dispensed shall be within the labeled expiry period. The expiration date identifies the time during which the article can be expected to meet the requirements of the compendial monograph, provided it is kept under the prescribed storage conditions. The expiration date limits the time during which the article may be dispensed or used. If an expiration date is stated only in terms of the month and the year, then the intended expiration date is the last day of the stated month.

The beyond-use date is the date after which a product shall not be used. The dispenser shall place on the label of the prescription container a suitable beyond-use date to limit the patient's use of the article based on any information supplied by the manufacturer or this subsection. The beyond-use date shall not be later than the expiration date on the manufacturer's container. Also see the section *Compounded Preparations* below.

For articles that require constitution before use, a suitable beyond-use date for the constituted product shall be identified in the labeling.

For all other dosage forms, in determining a beyond-use date the dispenser shall take into account, in addition to any other relevant factors:

- Nature of the drug
- Container in which it was packaged by the manufacturer and the expiration date thereon
- Characteristics of the patient's container, if the article is repackaged for dispensing
- Expected storage conditions to which the article may be exposed
- Unusual storage conditions to which the article may be exposed
- Expected length of the course of therapy.

After considering these factors, the dispenser shall label a container with a suitable beyond-use date to limit the patient's use of the article. Unless otherwise specified in the individual monograph or in the absence of stability data to the contrary, the beyond-use date shall be not later than: (a) the expiration date on the manufacturer's container; or (b) 1 year from the date the drug is dispensed, whichever is earlier. For nonsterile solid and liquid dosage forms that are packaged in single-unit and unit-dose containers, the beyond-use date shall be 1 year from the date the drug is packaged into the single-unit or unit-dose container or the expiration date on the manufacturer's container, whichever is earlier, unless stability data or the manufacturer's labeling indicates otherwise. (RB 1-Sep-2019)

Labels and Labeling for Compounded Preparations

The labels and labeling state the following information:

In the case of a compounded preparation, list the name(s) and amount(s) or concentrations of active moiety(ies) or drug substance(s) on the immediate container (see *Pharmaceutical Compounding—Sterile Preparations* (797) and *Pharmaceutical Compounding—Nonsterile Preparations* (795).)

In the case of a compounded preparation prepared in 503A facilities as defined by FDCA §503A, the labeling should indicate that "this is a compounded preparation."

The label on the container or package of a compounded preparation must bear a BUD. The BUD is determined from the date the preparation is compounded. Because compounded preparations are intended for administration immediately or following short-term storage, their BUDs may be assigned based on criteria different from those applied to assigning expiration dates to manufactured drug products.

The monograph for an official compounded preparation typically includes a BUD that states the time period following the date of compounding during which the preparation, properly stored, may be used. For guidance regarding the BUD for compounded sterile and nonsterile preparations, see $\langle 797 \rangle$ and $\langle 795 \rangle$, respectively.

The label on the official compounded preparation must include the word "compounded" after the drug portion of a non-proprietary name (e.g., "Baclofen Compounded Oral Suspension").

Dialysis, Hemofiltration, and Irrigation

Solutions that are intended for use as dialysis, hemofiltration, or irrigation, and are packaged in a container with a volume of more than 1 L, must be labeled to indicate that the contents are not to be administered either intravenously or intraarterially.

Use of Leading and Terminal Zeros

To help minimize the possibility of errors in drug dispensing and administration, when the quantity of active moiety or drug substance is expressed in whole numbers it must be shown without a decimal point followed by a terminal zero (e.g., express as 4 mg, not 4.0 mg). When the quantity of active moiety or drug substance is expressed as a decimal number smaller than 1, it must be shown with a zero preceding the decimal point (e.g., express as 0.2 mg, not .2 mg).

Units

Abbreviations for the terms "Units" or "International Units" must not be used for labeling or prescribing purposes. Examples include "U", "u", and "IU". Medication errors have occurred when these abbreviations have been used. See *General Notices*, 9.10 Use of Metric Units.

Alcohol

The alcohol content in a liquid formulation must be stated on the label as a percentage (v/v) of alcohol (C_2H_5OH).

Botanicals

The label of an herb or other botanical intended for use as a dietary supplement shall bear the statement, "If you are pregnant or nursing a baby, seek the advice of a health professional before using this product."

Electrolytes

The concentration of each electrolyte for replacement therapy (e.g., sodium, potassium, chloride) must be stated on the label in milliequivalents per volume (mEq/volume). Phosphorus containing injections must be expressed in milliMoles per volume (e.g., mM/volume). The label of the product must also indicate the quantity of ingredient(s) in terms of weight or percentage concentration.

Non-Oral Products

Non-oral product labels and labeling must state the names of added substances (as defined in *General Notices, 5.20 Added Substances*) in compliance with 21 CFR §201.100(b)(5).

Salts of Drugs

It is an established principle that official articles must have only one official title (see *General Notices, 2.20 Official Articles* and compendial nomenclature requirements in (1121)). For purposes of saving space on labels and because chemical symbols for the most common inorganic salts of drugs are well known to practitioners, the following alternatives are permitted in labeling official articles that are salts: HCl for hydrochloride; HBr for hydrobromide; Na for sodium; and K for potassium. The symbols Na and K are intended for use in abbreviating names of the salts of organic acids, but these symbols are not used when the word Sodium or Potassium appears at the beginning of an official title (e.g., Phenobarbital Na is acceptable, but Na Salicylate is not).

Special Capsules and Tablets

The label of any form of capsule or tablet intended for administration other than by swallowing intact must bear a prominent indication of the manner in which it should be used (see *Compendial Nomenclature, Nomenclature Guidelines* on the USP website at www.usp.org).

Products That Contain Vitamins

The vitamin content of a drug product must be stated on the label in metric units per dosage unit. The amounts of vitamins A, D, and E may also be stated in USP Units. Quantities of vitamin A declared in metric units refer to the equivalent amounts of retinol (vitamin A alcohol).

Controlled Room Temperature

Articles may be labeled for storage at "controlled room temperature" or at "20° to 25°", or other equivalent wording based on the same mean kinetic temperature. All three labeling options must ensure not to exceed the mean kinetic temperature of 25° with excursions between 15° and 30° (see $\langle 659 \rangle$).

Light-Resistant Container

When an opaque covering is used to provide protection from light for a light-sensitive product packaged in a clear or colorless or translucent container, the label of the container bears a statement that the opaque covering is needed until the contents are to be used or administered (see Containers—Performance Testing (671), Spectral Transmission and (659)).

Single-Unit Container

Each single-unit container must be labeled to indicate the identity; quantity and/or strength; name of the manufacturer, packer, or distributor; lot number; and expiration date of the article (see $\langle 659 \rangle$).

Single-Dose Container

When space permits a single-dose container must be labeled as such, and should include on the label appropriate discard instructions (see (659)).

Multiple-Dose Container

When space permits, a multiple-dose container must be labeled as such (see (659)).

Unit-of-Use Container

A unit-of-use container must be labeled as such (see (659)).

Protection from Freezing

The container label must bear an appropriate instruction to protect the article from freezing if subject to loss of strength or potency, or to destructive alteration of its characteristics (see (659)).

Prescription Container Labeling

At a minimum, a prescription container must be labeled in a patient-centered manner. The label must contain essential information that is important for the patient's safe and effective use of the medicine. Labels should be designed and formatted to optimize readability and understanding (see *Prescription Container Labeling* (17)).

GENERAL LABELING

Users are reminded to always refer to the General Notices in assessing or applying any compendial standards. General Notices addresses a number of labeling-related aspects, including 3.20 Indicating Conformance (when an article may be labeled USP, NF, or USP–NF, and requirements related to differences in identity, naming, strength, quality, or purity); General Notices, 5.20.20 Added Substances (Excipients and Ingredients) in Official Products; 6.70 Reagents; and 8.240 Weights and Measures (e.g., microgram may be represented as either ug or mcg. For labeling or prescribing purposes, only "mcg" is to be used).

LABELS AND LABELING FOR ANIMAL DRUG PRODUCTS

This section provides exceptions or additions to the previous requirements in this chapter. The following requirements are specific to the labeling for animal drug products.

Definitions

The written printed or graphic matter on the outer shipping container for animal drugs is considered to be part of "labeling". Shipping labeling for animal drugs should contain, at minimum, product identification, lot number, expiration date, and conditions for storage and handling.

Labeling for Animal Drug Products

The labeling for animal drugs should identify the animal species and, if applicable, specific subset(s) of the animal species for which the drug is approved, conditionally approved, or indexed. In the case of a compounded preparation for animals, the labeling should indicate that "This is a compounded preparation."

The labeling for prescription animal drug products must include the following statement:

• "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian."

Labeling for Injectable Animal Drug Products

Labeling for injectable animal drug products includes the following information:

• A statement limiting the time frame in which the container may be used once it has been entered (e.g., needle-punctured), provided it is held under the labeled storage conditions.

Quantity and Total Volume for Single- and Multiple-Dose Injectable Animal Drug Products

Because of considerable variability in body weight within and among animal species, most injectable animal drugs are approved to be dosed on a mg/kg body weight basis. Thus, strength on labeling for single- and multiple-dose injectable animal drugs should be expressed on the basis of quantity per milliliter (quantity/mL), usually mg/mL. An exception would be for single-dose injectable animal drugs that are dosed regardless of the weight of the animal, in which case strength on labeling should be expressed as quantity per total volume (e.g., 50 mg/5 mL). For single-dose containers holding less than 1 mL, strength on labeling should be expressed as quantity per fraction of a mL (e.g., 12.5 mg/0.625 mL).

Dry solids that must be constituted should provide on labeling the total quantity followed by the quantity per milliliter (quantity/mL) after constitution.

Compounded Veterinary Preparations

The label on the official compounded veterinary preparation must include the word "compounded" after the drug portion of a non-proprietary name and the word "veterinary" at the end of the full official name (e.g., Atenolol Compounded Oral Suspension, Veterinary).