Extemporaneous Unit-Dose Packaging of Oral Solids

Oral Solid Packaging Terminology ......................... 2
Expiration Date and Beyond Use ............................ 2-3
Other Important Unit Dose Packaging
   Considerations ............................................. 3-4
Latest USP Packaging Revisions ............................. 4
Characteristics of a Blister Package .......................... 4
USP Testing ...................................................... 5
HCL Package Testing .......................................... 5
USP Test Method Employed ................................... 5
USP Class Ratings ............................................. 6
Determination of Results for
   HCL Packaging Products .................................. 6
Blister Packaging Accessories ............................... 6-7
WASP Barcode Labeling Software
   - HCL 5117 & HCL 5186 .................................... 7
Summary & References ....................................... 7
What Label Should I Use With My Blister Chart .......... 8
All solid dose pharmaceuticals **DO NOT** come packaged from the original manufacturer in unit-of-use or unit-dose packaging. As a result the pharmacist in many instances has to rely on the extemporaneous packaging of oral solids. The pharmacist is then faced with decisions as to the type of packaging/containers to be used; the reliability of the container/closure system with respect to stability and moisture permeation; its ability to protect the integrity of the drug; and ultimately the assignment of expiration dating to the product. Fortunately the USP and ASHP have provided definitions, tools and guidelines to aid in these important packaging decisions.

This HCL Technical Bulletin is intended, in a concise and comprehensible manner to:

1. **define** terms associated with oral solid packaging
2. **detail** a USP testing procedure used to determine package rating of HCL's products
3. **discuss** associated security and record keeping issues
4. **serve** as a decision making resource regarding choice of suitable packaging materials and the assignment of expiration dating

### ORAL SOLID PACKAGING TERMINOLOGY

**Containers:** The container is that which holds the article and is or may be in direct contact with the article. The immediate container is that which is in direct contact with the article at all times. The closure is part of the container.

**Tight Containers:** A tight container protects the contents from contamination by extraneous liquids, solids, or vapors, from loss of the article and from efflorescence, deliquescence, or evaporation under the ordinary or customary conditions of handling, shipment, storage, and distribution, and is capable of tight re-closure.

**Well-Closed Container:** A well-closed container protects the contents from extraneous solids and from loss of the article under ordinary or customary conditions of handling, shipment, storage, and distribution.

**Single-Unit Container:** A single-unit container is one that is designed to hold a quantity of drug product intended for administration as a single dose or a single finished device intended for use promptly after the container is opened. Preferably, the immediate container and/or the outer container or protective packaging shall be so designed as to show evidence of any tampering with the contents. Each single-unit container shall be labeled to indicate the identity, quantity and/or strength, name of the manufacturer, lot number, and expiration date of the article.

**Unit-Dose Container:** A unit-dose container is a single-unit container for articles intended for administration by other than the parenteral route as a single dose, direct from the container.

**Unit-of-Use Container:** A unit-of-use container is one that contains a specific quantity of a drug product and that is intended to be dispensed as such without further modification except for the addition of appropriate labeling. A unit-of-use container is labeled as such.

### EXPIRATION DATE AND BEYOND USE

The label of an official drug product, nutritional or dietary supplement shall bear an expiration date. An official dosage form is required to bear on its label an expiration date. This date is to be assigned for the particular product and package. The expiration date identifies the time during which the article may be expected to meet the requirement of the Pharmacopeia monograph provided it is kept under the prescribed storage conditions. This expiration date limits the time during which the article may be dispensed or used. Bulk containers of drug products direct from the manufacturer have pre-determined dating based on the particular container and drug product and the required testing performed by the manufacturer. This dating may not be applicable to the product when it has been repackaged in a different container. It is therefore necessary to take other precautions to preserve the strength, quality and purity of the drug product being repackaged.

When one repackages a drug product from its original container to a secondary container (i.e. unit dose packages, etc.) it becomes the responsibility of the pharmacist or repackager to place a beyond-use date on this package. The USP provides guidelines for the beyond-use dating of repackaged unit-dose containers: (USP 30 -Section 1146). The beyond-use date is the date after which an article must not be used. The dispenser shall place on the label of the container a suitable beyond-use date to limit the use of the article based on any information supplied by the manufacturer.

It is the responsibility of the dispenser, taking into account the nature of the drug repackaged, the characteristics of the container and the storage conditions to which it may be subjected, to determine a suitable beyond-use (expiration date) to be placed on the label of the repackaged product.
Relevant factors to take into account are:

- the nature of the drug repackaged
- the container in which it was packaged by the manufacturer and the expiration date thereon
- the characteristics of the new or patient’s container
- the expected storage conditions to which the article may be exposed
- any unusual storage conditions to which the article may be exposed
- and the expected length of time of the course of therapy or put-up.

In the absence of stability data of the drug product in the repackaged container, the beyond-use dating is one year or the time remaining of the expiration date, whichever is shorter. If current stability data is available for the drug product in the repackaged container, the length of the time established by the stability study may be used to establish the beyond-use date but must not exceed the manufacturers’ expiration date. The beyond-use date placed on the label shall not be later than the expiration date on the manufacturer’s container.

As a recap, repackaged dosage forms must bear on their labels beyond-use dates as determined from information in the product labeling. Unless otherwise specified in the individual monograph, or in the absence of stability data to the contrary, such beyond-use dates shall be no later than

a. the expiration date on the manufacturer’s container,
   or
b. one year from the date the drug is dispensed, whichever is earlier

(Note: this is dependent on the packaging materials chosen for repackaging as you will find out later in this technical bulletin).

Each single-unit or unit-dose blister must bear a separate label indicating such expiration date. Based on the drug product to be packaged, the estimated time until use of the product; manufacturer’s expiry dating on the original bulk container and pharmacy specific economic factors one has the ability to pick the appropriate HCL packaging offerings that can meet specific packaging decision criteria.

It is recommended that only an amount of stock sufficient for limited time be repackaged.

**OTHER IMPORTANT UNIT DOSE PACKAGING CONSIDERATIONS**

**Light Transmission**

The integrity of certain drug products is challenged because of their sensitivity to light. A light-resistant container protects the contents from the effects of light by virtue of the specific properties of the material which it is composed, including any coating applied to it. Where it is directed to “protect from light” in an individual monograph, preservation in a light resistant container is intended. Amber colored plastic blisters are available that provide excellent light protection in the critical 290 to 450 nanometer range. All of Health Care Logistics amber blisters meet the USP light transmission standards for light sensitive drugs. In HCL’s Colored Round Cavity blister note that only the amber and green blisters meet USP light transmission standards. The blue round cavity blister **does not contain UV light protection**

**Tamper Evidency**

Packages should show evidence of entry or tampering. Essentially, these are packages that when sealed the contents cannot be used without obvious destruction of the seal, as such they are not re-sealable. Note that HCL does test all of its packaging configurations (blister & label) for tamper evidency.

**Record Keeping**

In instances where quantities are repackaged in advance of immediate needs, the dispenser is required to maintain suitable repackaging records. During the repackaging process care should be taken to assure accountability and lot number traceability of the repackaged product.

Data should be collected in a log book that specifies the following:

- drug product repackaged
- the name of the manufacturer
- lot number and expiration date from the original manufacturer’s container
- the number of doses repackaged
- the internal lot number and beyond-use date assigned
- the date of repackaging and the designation of persons responsible for repackaging and checking

The repackager or dispenser will also use documented controls to prevent labeling errors.

**Labeling Requirements**

Each single-unit or unit-dose container should bear a separate label.

The labeling requirements for a commercial repackager and pharmacist are different. The repackager must comply with 21 CFR 201.1 and the pharmacist dispenser does not. The pharmacist dispenser shall however, include the following on the label:

- Product Name
- Strength
- Dosage Form
- Lot Number
- Beyond-Use (Expiration) Date
- Packaged By
- Manufacturer (Note: Given bar code accountability programs the use of the NDC number and corresponding bar code could substitute for actual manufacturer’s name)

HCL sells a comprehensive labeling software with templates developed for all of the labels sold by HCL. The templates are laid out to include all of the above pertinent label information for ease of label creation. This software also includes the ability to place scannable bar codes that correspond to the product NDC number on each label. HCL’s WASP Barcode Labeling Software item numbers are HCL #5117 and HCL #5186. It is described in more detail later in this bulletin.
It is also recommended that current federal labeling requirements be adhered to, with particular attention given to the following items given label space:

- Nonproprietary name (and proprietary name, if to be shown)
- Dosage Form (if special or other than oral)
- Strength
- Strength of Dose and Total Contents
- Delivered (e.g., number of tablets and their total dose)
- Special Notes & Storage Requirements (e.g., refrigerate)
- Expiration Date
- Control or Lot Number
- Patient Specific Packaging

In addition, if the package is meant to be patient specific (as one intended for use in a long term care facility); it should also bear an over label stating:

I. the name of the patient
II. a package/prescription specific serial number
III. the directions for use and cautionary statements
IV. the name of the prescriber
V. the name, address, and telephone number of the dispenser

Storage Requirements

After repackaging and while still in the pharmacy, storage of unit-dose or single-unit containers should be in a humidity-controlled environment and at the temperature specified in the individual monograph or in the product labeling. The dispenser must maintain the facility where the dosage forms are packaged and stored, at a temperature such that the mean kinetic temperature is not greater than 25 °C. Records must be kept of the temperature of the facility where the dosage forms are stored, and of the plastic materials used in packaging. Note that HCL carries a wide variety of Temperature Monitoring Devices that facilitate record keeping.

LATEST USP PACKAGING REVISIONS

Section <1146> of USP 30 details the latest revisions regarding “Packaging Practice - Repackaging A Single Solid Oral Drug Product Into A Unit-Dose Container”. This general chapter contains minimum standards to be used as guidelines for repackaging practices. The USP in this section makes the distinction between two types of repackaging - 1. commercial repackaging firms and 2. pharmacies that dispense prescription drugs. For the purpose of this Technical Bulletin we are restricting our discussion to pharmacies that dispense prescription drugs.

The USP defines “Pharmacy” as “an establishment that is legally responsible for providing the drug preparation for patient use, with a specific patient label, pursuant to a prescription or a medication order.” The terms dispenser and pharmacy are used interchangeably.

They go on in this section to discuss blister-packaging materials and they indicate that blister packages “offer a wide array of designs of both functionality and appearance”. A blister consists of two components: the blister film or the formed cavity that holds the drug product and the lid stock which is the material that seals the blister. Together they form the drug package that is designed to protect the dosage form especially from 'moisture permeation'. It is important to understand here that the final protection that the package offers is dependent on both the blister material and lidding stock. [See Table I for General Characteristics of a Blister Package]

There are a wide variety of blister films available and the USP indicates that the film selection should be based upon the degree of protection one requires for the drug product that it will contain. There are widely varying degrees of moisture protection available.

Polyvinyl chloride (PVC) is the most commonly used blister material and it provides a zero to nominal barrier to moisture depending on the degree of thickness of the film. The thicker the PVC film the better degree of moisture barrier. The USP goes on to indicate that they are recommending a plastic material that affords a better protection than PVC and it discusses various plastic laminates commonly used in the pharmaceutical industry. With respect to the lid stock they also indicate that different designs of lid stocks are available and selection depends on how the package is intended to be used.

Keep in mind that the primary purpose of the unit-dose package used is to ensure that throughout its intended expiration dating that there is adequate protection from the environment as the dosage form is stored and distributed. As such the pharmacist must make some basic decisions when choosing unit dose packaging materials.

**TABLE I**

**CHARACTERISTICS OF A BLISTER PACKAGE**

| I.  | have an opaque and non-reflective backing (flat upper surface of package) for printing |
| II. | have a blister (dome or bubble) of a transparent material that is, preferably, flat bottomed |
| III. | be easily peelable and provide evidence of entry |
| IV. | if containing a controlled substance, be numbered sequentially for accountability purposes |
USP TESTING

Differences in packaging materials; packaging procedures; personnel and techniques used in the process of packaging; mean that the moisture-permeation characteristics of the packaging system to be utilized in the pharmacy is most important and needs to be determined.

In USP 30 <Section 671> - Containers – Permeation the USP provides tests used to determine the moisture permeability of containers utilized for drugs being dispensed on prescription. Testing is performed to permit an informed judgment regarding the suitability of the package for a particular type of product and situation. They provide a classification scheme for evaluating the moisture characteristics of single-unit and unit-dose containers.

In this USP section “Single-unit Containers and Unit-dose Containers for Capsules and Tablets” applies to single-unit and unit-dose containers for non-sterile solid dosage forms which is the focus of this Technical Bulletin.

HCL PACKAGE TESTING

Health Care Logistics commissions USP package testing in order to verify the performance of its unit-dose packaging.

The USP Standard Test Method I from Section 671 - Containers-Permeation is used in the testing. It is described as follows: Desiccant tablets are dried at 110°C for one (1) hour prior to use. The desiccant tablets used are (Item TK-1002) from Medical Packaging, Inc. These tablets indicate a change in moisture content through a weight gain over time and a change in color (from blue to pink) when saturated. The tablets weigh approximately 400mg and have an approximate diameter of 8mm. The major point in this testing procedure is to maintain a constant weight and a uniform pellet size for the respective unit-dose blister over time.

USP Test Method Employed

A. Blister Assembly

Two strips of ten (10) single unit-dose blisters are assembled. One (1) desiccant tablet is placed into each blister of the first strip of ten (10). The second strip of ten (10) is used as a “control”. No desiccant tablet is included in the control.

B. Sealing of the Blister

Plastic or foam trays with pre-formed individual compartments that accept the various sized blister, are used to perform the sealing task. The following is the method that is used to seal blisters during USP testing and is the recommended method used for sealing any of HCL's blisters:

The blister strip is placed in the foam or plastic tray. The drug product is placed in the blister. The pre-labeled lidding material is then affixed by hand to the blister strip. Moderate pressure is applied to the package using a sealing roller.

C. Labeling and Weighing of Samples

Each sample is numbered and identified in a manner as to determine the packaging material, lot number and manufacturer’s information (i.e, date of manufacture; type of adhesive, etc). The weighing of samples and controls is carried out by using an electrical analytical balance that records values. This permits a more precise characterization between daily weighing of samples and control and allows for shorter test periods. “Class A” containers require test periods in excess of 28 days. The weights of each sample and of each control are logged as the initial weights for the start of the test procedure.

D. Storage Parameters and Test Period

The ten (10) samples and controls are stored in a constant humidity tank at 75 ± 3% relative humidity and at a temperature of 23° ± 2°C for a period of 30 to 35 days. Temperature and humidity gauges are used both in and outside the tank for monitoring. Weighing continues at 24-hour intervals, the samples and the control are removed from the humidity tank and allowed to equilibrate to one hour at room temperature. Sample weights and the control weight are recorded as previously noted. Intervals greater than 24 hours may be used, however, they must be multiples of 24 hours. As the daily weighing continues, if any desiccant tablets turn pink during the procedure, the test is terminated. If the pellet weight increases greater than 10% during any one 24-hour period, the test must also be terminated.

E. Calculations

To calculate the moisture permeation, the following USP formula is used to determine the mg gained per day:

\[ \text{Moisture Permeation} = \frac{1}{N} \left( \frac{W_f - W_i}{C_f - C_i} \right) \]

Where: N is the number of days (24 hr increments) expired during the test

\( (W_f - W_i) \) is the mg difference between the final weight and the initial weight on each sample;

\( (C_f - C_i) \) is the average mg difference between the final and initial weight of the control. The result [Moisture Permeation] is then expressed in “mg/day” of moisture gain. The testing is to be taken through its completion through a 30 day testing period. If a desiccant tablet turns pink during the course of the 30 days testing is terminated. If a tablet weight in any of the test groups increases greater than 10% in any one 24-hour period the test is also terminated.
**USP CLASS RATINGS**

* **Class “A”**: if not more than 1 of 10 samples exceeds 0.5mg per day in moisture permeation rate and none exceeds 1mg per day.

* **Class “B”**: if not more than 1 of 10 samples exceeds 5mg per day in moisture permeation and none exceeds 10mg per day.

* **Class “C”**: if not more than 1 of 10 samples exceeds 20mg per day moisture permeation and none exceeds 40mg per day.

* **Class “D”**: if the samples meet none of the above.

These class ratings provide the pharmacist with a professional tool. They are used to judge whether or not a specific unit-dose package (blisters and foil label) has the ability to prevent moisture from entering the sealed unit during its storage period. A determination can be made from day of packaging to date of use or to the final expiration day and to what magnitude it protects the integrity of the drug product.

**DETERMINATION OF RESULTS FOR HCL PACKAGING PRODUCTS**

Health Care Logistics carries a wide range of unit-dose packaging materials - blisters and lidding (labels). This range of packaging materials provides users with the ability to pick the appropriate packaging components that meet their specific packaging decision criteria. Health Care Logistics utilizes the earlier described USP Test Procedure to test all of its packaging materials. Based upon the test data collected during testing and the resultant calculations after applying the USP formula; the following represents the recommended combinations of blisters and labels given different levels of drug product protection:

1. HCL recommends the use of it’s “Extra High Barrier Blisters” with its “Extra High Barrier Foil Labels”.

These “Extra High Barrier Blisters” are made from an Aclar plastic laminate or a PVCd to keep pace with the latest USP packaging recommendations. This combination of blister and label affords the highest in moisture barrier protection properties - “Class A”. According to the USP guidelines this packaging combination provides the maximum in drug protection up to 1 year.

2. HCL recommends the use of it’s amber or clear “High Barrier Blisters” with its “High Barrier Foil” labels.

The “High Barrier Blisters” is a thicker film PVC (poly vinyl chloride) plastic. Based upon the USP Test Procedure this combination of blisters and labels meets USP “Class B” package requirements. This combination is used to provide protection to a drug product or when packaging drugs for periods of up to 6-months time.

3. In situations where rapid drug inventory turnover is experienced Health Care Logistics “Budget Blisters” or “Compact” blisters in combination with its “Paper” labels are often used. They provide minimal storage protection and are classified as a USP “Class D” package, which is for 30 days from the date of packaging.

These “Budget Blisters” are made from a thinner mil PVC (poly vinyl chloride) plastic and are moderately priced in comparison to the “High Barrier” and “Extra High Barrier” blisters which provide increasingly more protection for drug products.

**See the chart on page 8 for HCL blister and label combinations.**

HCL cannot be responsible for the moisture barrier properties of non-standard combinations of blisters and labels.

From time to time customers purchase combinations other than what was tested because of misinterpretation of USP standards or recommendations.

One example could be the use of an Extra High Barrier Blister with a paper label. The common misconception here is that the “Extra High Barrier Blister” alone without consideration of the lid stock will allow the pharmacist to extend the dating to 1-year. In this case one would be wasting their money trying to economize on the lidding cost. An “Extra High Barrier blister with a paper label does not meet a Class A standard.

Another common misconception is that the USP standards allow one to extend the dating on any package to 1-year. Careful reading of USP 30 Sections <1146> and <671> indicate that 1-year dating is only allowed in those packages that provide the moisture permeation protection of a Class A package.

HCL uses a thin gauge mil PVC for its Budget Blisters and a thicker gauge for its “High Barrier Blisters”. HCL also has added a new “Extra High Barrier Blister” made of an Aclar” laminate and PVCd to its product line. Collectively, these product offerings provide a range in product protection. HCL will continue to provide a selection of materials that offer this range.

The dispenser should always make sure that in taking on the extemporaneous packaging task, that they should refer to the latest guidelines and exercise proper professional judgment that keeps them in compliance.

As a recap - note that HCL has packaging combinations that provide the ability to choose the one that’s most appropriate and can meet the site-specific packaging decision criteria - from 30-day dating to 1-year.

**BLISTER PACKAGING ACCESSORIES**

Health Care Logistics has a wide variety of blister packaging accessories that fully complement the blister and label product line and are used in conjunction with the extemporaneous packaging task. These include filling trays and templates that accommodate various sizes of tablets and capsules as well as the various sizes of blisters from “compact” to “extra large”. These trays and templates are designed to facilitate and speed the filling and packaging of the unit dose blisters.

Aclar is a registered trademark of Honeywell International, Inc.
**Other accessories include:**

- labeling and bar code software
- flag labels and flag labels with hanging hole for pegboard hanging that provide extra label space for additional labeling information/instructions
- sealing rollers for package sealing
- MEGA blister that holds several medications or components
- condensed blisters for use in automated dispensing machines
- packaging record keeping sheets
- stenciling kits for labeling
- lidding materials that are compatible with ink-jet and laser printers for labeling purposes
- beyond use auxiliary labels
- zebra printers and direct and thermal transfer labels
- oral solid unit dose starter kits
- colored round blisters with regular and deep cavities

All of these products and accessories can be purchased separately or in kits. Whether one is looking for an inexpensive way to get started with unit-dose packaging or just a dependable and economical manual alternative as a backup to existing systems for short runs, HCL has the packaging products and accessories that are used to accomplish this important packaging task.

---

**WASP BARCODE LABELING SOFTWARE - HCL 5117 & HCL 5186**

An increase in medication errors has prompted the healthcare world to improve patient safety by implementing ways to reduce them. One way is to place scannable bar codes on individual unit dose blister labels. To do so HCL provides a flexible and powerful Barcode Labeling Software called WASP. This software package includes pre-defined templates (no label creation needed) for all HCL blister labels as well as the option of creating custom layouts for virtually any type or size label. This is a robust software package that is user-friendly and intuitive. It allows for the use of virtually any font type, color, size, and attributes (bold, italic, underlined) which are all user defined and combined on any label to increase awareness. It supports twelve different 1D bar code symbologies and is also available in a 2D barcode version with four of the most popular 2D barcodes that allows capture of lot number and expiration dating. The bar code as well as text can be placed on labels to assure that the right drug and dose are being administered to the correct patient, while also providing inventory control and improved documentation.

- print in color
- rotate text
- use with databases for reports
- customize any label layout
- all HCL labels have templates
- incorporate 1D or 2D barcodes

**SUMMARY**

Drug packaging is an important consideration. The package should protect its contents from deleterious environmental effects. Protect its contents from deterioration from handling such as breakage and contamination. Identify its contents completely and precisely and permit its contents to be used quickly, easily and safely. Utilizing the guidelines made available by the USP and the American Society of Health Systems Pharmacists this Technical Bulletin has attempted to pull together the important information and criteria necessary to aid the pharmacist in making the right decisions to assure the integrity of all products dispensed by the pharmacy.

**References**

The United States Pharmacopeia, USP 30
* Section <661> Containers
* Section <671> Containers/Permeation
* Section <1146> Packaging Practice - Repackaging a Single Solid Oral Drug Product Into a Unit-Dose Container

ASHP Technical Assistance Bulletin on Single Unit and Unit Dose Packages of Drugs Moisture Permeation

Studies Commissioned by Health Care Logistics and

Manufacturer’s Product Specifications (data available upon request)
### WHAT LABEL SHOULD I USE WITH MY BLISTER?

<table>
<thead>
<tr>
<th>Blister Type</th>
<th>Label Type</th>
<th>Class/Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extra High Barrier</strong></td>
<td>- 6022 Extra High Barrier Flag Foil Label for Micro #7017</td>
<td>Highest level of protection</td>
</tr>
<tr>
<td></td>
<td>- 6027 Extra High Barrier Flag Foil Label for Micro #7017</td>
<td>Combination of blisters and labels meets USP Class A Package</td>
</tr>
<tr>
<td></td>
<td>- 6121 Extra High Barrier Flag Foil Label, Laser (fits 7014, 7015, &amp; 7016)</td>
<td>Requirements - 1 year expiration date from the date of packaging</td>
</tr>
<tr>
<td></td>
<td>- 5118 Extra High Barrier Flag Foil Label, Pinfeed (fits 7014, 7015, &amp; 7016)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6025 Extra High Barrier Flag Foil Label (fits 7014, 7015, &amp; 7016)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6123 Foil for Condensed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6125 Laser Label for Round &amp; Deep Round</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6126 Laser Label for #7004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 17297 Thermal Transfer, 1”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 17298 Thermal Transfer, 3”</td>
<td></td>
</tr>
<tr>
<td><strong>High Barrier</strong></td>
<td>- 6118 High Barrier Foil, Laser</td>
<td>Medium level of protection</td>
</tr>
<tr>
<td></td>
<td>- 6119 X-Large High Barrier Foil Label, Laser</td>
<td>Combination of blisters and labels meets USP Class B Package</td>
</tr>
<tr>
<td></td>
<td>- 6122 X-Large High Barrier Foil Label, Laser</td>
<td>Requirements - 6 month expiration date from the date of packaging</td>
</tr>
<tr>
<td></td>
<td>- 6015 New Technology Foil Label, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6015 New Technology Foil Label, Fanfold</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6031 X-Large Regular Foil Label, Fanfold</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 7048 Regular Foil Label, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 7046 Regular Foil Label, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 7045 Regular Foil Label with Consecutive Numbers, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6024 High Barrier Flag Foil Label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6123 Foil for Condensed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 17295 Direct Thermal, 1” core</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6019 Direct Thermal, 1” core</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Unless specified as X-Large, labels fit all high barrier blisters</td>
<td></td>
</tr>
<tr>
<td><strong>Budget</strong></td>
<td>- 6116 New Technology Paper Label, Laser</td>
<td>Minimal level of protection</td>
</tr>
<tr>
<td></td>
<td>- 6110 New Technology Paper Label, Roll</td>
<td>Combination of blisters and labels meets USP Class D Package</td>
</tr>
<tr>
<td></td>
<td>- 6115 New Technology Paper Label, Fanfold</td>
<td>Requirements - 30 day expiration date from the date of packaging</td>
</tr>
<tr>
<td></td>
<td>- 7052 Regular Paper Label, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 7054 Regular Paper Label, Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*labels fit all budget blisters</td>
<td></td>
</tr>
<tr>
<td><strong>Compact</strong></td>
<td>- 7030 Compact Paper Label, Roll</td>
<td>Minimal level of protection</td>
</tr>
<tr>
<td></td>
<td>- 7035 Compact Paper Label, Fanfold</td>
<td>Combination of blisters and labels meets USP Class D Package</td>
</tr>
<tr>
<td></td>
<td>- 6113 Compact Paper Label, Laser</td>
<td>Requirements - 30 day expiration date from the date of packaging</td>
</tr>
<tr>
<td></td>
<td>*labels fit all compact blisters</td>
<td></td>
</tr>
<tr>
<td><strong>MEGA Blister</strong></td>
<td>- 6023 Paper Label for Mega Blister, laser</td>
<td>Serves as a carrier or starter</td>
</tr>
<tr>
<td></td>
<td>*labels fit all compact blisters</td>
<td>Combination of blisters and labels inside of this blister determine expiration dating</td>
</tr>
</tbody>
</table>