

## **Batch/Lot Coding and Labeling of Maple Syrup**

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### **Introduction**

As a sugar maker you strive to follow all best management practices through the entire process. Every step in the process from tapping the trees to bottling the syrup you should take all precautions to produce a food that is safe and the highest quality for human consumption. However, even if following all the proper food handling processes, sometimes things happen to derail your due diligence.

Consumers today and retailers are more demanding toward product quality control procedures than in years past. New laws and food processing and handling protocols call for more scrutiny by the producers of any food product. The process of product traceability has become a necessity. It protects both the producer and the consumer. All levels of retail now demand it and producers should be taking the issue seriously. Good news is it is not that difficult to develop a traceability program for your maple syrup. A traceability program can be as easy or complicated as you want it to be. Only you and the retailer need to know what the code represents. There are many benefits to implementing a traceability program where you bottle a few containers or hundreds or thousands of containers a year. The code or traceability stamp will contain valuable information such as inventory turn over time; following what the food industry calls “First In First Out”; and improve the implementation of quality control protocols. Most importantly is keep it simple and you are more likely to utilize the process.

### **If Something Does Go Wrong**

As the producer you may be forced to recall and possibly disposal of your products. If you do not have documentation through coding of your batches of products you may be required to recall ALL of your products to determine what is still able to be sold. Being prepared through batch coding of your products is the first step in the process.

No matter how large or small of a maple operation the possibility of contaminated products is a possibility. Due to the increase attention given to food safety, quality control and liability issues a simple coding system will save you a lot of problems. As an example: a container of your syrup was found not within the quality control standards and if you cannot determine how many containers and their locations of the batch you may be required to recall all containers to determine quality issues. If batch coded only the containers containing that batch code will need to be recalled. A simple step in coding will save you much frustration.

By batch coding each time you package products and tracking where they went you will be able to save money and time. Imagine having to recall every container of syrup you produced and having to open each one to check the quality of the product. Time is one thing but the expense of buying all new containers and re processing the syrup to standards for rebottling is costly. A simple traceability code will have saved you much time and money.

### **When To Do It:**

Every product that comes from your operation should contain a code. No matter the size container or volume in the package. It is a must for products going to another retail outlet but also a necessity to products from your sugarhouse or farm market outlets. If selling syrup in bulk every bulk container or barrel should contain a batch or lot code as well.

### How To Determine The Code:

Your code is yours and yours only. Unless a retailer requires you to use a coding system they utilize. It can be as complicated or simple as you want it. It needs to be small enough to fit on a large container like a gallon and on a small 3.4 ounce container as well. Each batch code should never exceed more than one day’s production of packaging.

Decide what system you want to use or a combination of systems to use. You can make it as simple as a single number which your records would indicate the packaging batch information or more sophisticated to give you more information for the batch (see Sample Batch Code Formats). Just insure that the system you chose is consistently used and documentation details in your record keeping system contain all the important information to the batch number (see Batch Record Keeping).

### Sample Batch Code Formats:

**Single Number:** Start with a number and simply add to the number for each batch.

Batch one is # 1, batch two is # 2, and so on.

**Actual Date:** The date the product was packaged can be used. This system is NOT suggested as if a retailer or consumer sees a date that is months to a year old they may think the product is past it freshness point or be of lower quality.

Batch one is 3/15/2015, Batch two is 3/16/2015, and so on. Again this system is not advised.

**Julian Calendar Date:** The Julian calendar is the system used by most large food processors within their code for products. Simple in a Julian date the first two numbers represent the year a product was packaged and the numbers following the year represent the day it was packaged. January 1<sup>st</sup> would be represented as a 1 and following this system 365 would represent December 31<sup>st</sup>.

If batch one was packaged on March 15, 2015 the Julian date would be 1575 or 15075

If a batch was packaged on November 22, 2015 the Julian date would be 15326

**Combination Codes:** Most large food packaging operations use a combination of codes within the Julian date system. That way they know which packaging line and shift of workers packaged the product. This makes their traceability to problems much faster and less costly. A combination code is the most recommended system and is not that complicated. The packaging batch is indicated at the start or end of the code. This will help with quick recognition of the order of packaging.

If the first batch of syrup is packaged on March 15, 2015 and a batch number is added it would look like this:

if batch number is added to the front of the code 115075

if batch number is added to the end of the code 150751

### **How to Apply the Code:**

The easiest way is with a price gun that stapes the code on a sticker that is applied to each container or package. A price gun can be purchased at many office supply stores. These price guns are easy to use and setting the code is easily and quickly in them and stickers are easy to apply right from the gun. Smaller operations may want to use a permanent marker instead. However this takes a lot more time to write on each container or package and does not look as neat. Consumers are used to seeing multiple stickers on products they purchase. The best method of application is to permanently apply it to the product and not on a sticker. Stickers can come off but a permanent stamp will not. Some retail outlets demand that stickers not be used and the code be in a permanent format. There are many permanent ink stamping devices on the market and readily available at office supply stores.

### **Applying the Coding System:**

Where to apply? No matter where you apply the code it needs to be legible and in place after the product is opened. If using stickers the back of a syrup container is suggested. The bottom is not a good place as it can peel off from shipping, shelf placement or use. It needs to be on the inner packaging as all times. If products are wrapped in a plastic rapping or sealing film then the number needs to be on the inside as most times a problem is found after the package is opened. If products are packaged in case lots to a retailer then the code system should be placed on the outside of each case too for easy identification of contents inside. This really helps with assuring that “First In First Out” concept is followed.

### **Record Keeping of Production:**

Record keeping is not an overly exciting job but it’s critically important to do. Applying the batch code to all products is only half of the job. The other half is to keep detailed and accurate records. In many sugarhouses the only record is a pencil mark on a wall of how many gallons were produced per boil during a sugaring season. This is good for comparisons between years but is not a good record keeping system. If accurate records cannot document the location of the batch of coded syrup with an issue it will be very difficult if not impossible to recall the syrup should an issue arise. Record keeping is essential to lower your risk and should be part of your overall risk management practices. Just as you would not put clean syrup into dirty containers you should not think you can get by with no record keeping. Some maple producers create elaborate computer spread sheets containing documentation of large amounts of various types of production related information. Others write down the basics in a notebook to reference if needed. The more information you record the better. Having the information will prove worth its effort if needed.

### **Suggestions Of Information To Record:**

- ◆ Time and Dates for; sap collection, boiling, baulk packaging, and container packaging
- ◆ Gallons of sap, and its sugar content
- ◆ Each filtering stage conducted
- ◆ Gallons of syrup produced
- ◆ Grade of syrup, color and density of final product packaged
- ◆ Embossed number of barrel stored in
  - Date in and out of barrel

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