Guidelines for Assuring Quality in Packaging Maple Syrup

Draft provided by Future Generations University 3-23

Filtering - Syrup to be double filtered, once at the evaporator and then again at the time of bottling. The first filtering to remove niter and the second filtering at the time of bottling to assure clarity for packing in glass

* A drum (or storage container) once opened is to be filtered and packed within 7 days or the unpacked syrup refrigerated.
* Brix checked with a refractometer (while cool) and density adjusted with RO water to between 66 and 68 degrees.
* Filter press Filtering - Syrup should be heated to facilitate second filtering. (Reference Smokey Lakes: using a filter press <https://www.youtube.com/watch?v=Jot6BiMi4vI>).
  + Heat filter press to 180 degrees by cycling hot syrup through and to assure clarity
  + Calculate appropriate amount of DE to use based on your filter press capacity
  + Filter up to 80 psi, at which point the press is clogged and needs to be rebuilt.
  + Stir syrup to keep DE in suspension.
* Gravity filtering with a flat filter or a “witches hat.” (Ref: <https://mapleresearch.org/pub/m1017gravityfiltering/>)
  + Syrup should be up to the proper brix before filtering
  + Syrup needs to be filtered hot
  + Use wool or orlon filters with a paper pre-filter
  + Rinse new filters in hot water wo remove any chemical residue from manufacture.
  + Filters should be rinsed in hot water/sap and hung to drip dry before use to reduce clogging.
  + Do not wring out or twist filters
  + Syrup at the end of a filtering session that won’t pass through the filter should be returned to the evaporator.
  + After filtering, rinse the filter – don’t soap wash.
  + At the end of the season store cleaned filters in a freezer to stop them from molding.

Bottling - (Reference: Bottling Maple Syrup in Glass Containers <https://www.youtube.com/watch?v=H09-hBUgqEU>)

* Syrup should be heated to 185 degrees F before packing to sterilize the glass.
* Bottles should be laid on their side for a few minutes to sterilize the tops
* 8 ounce or larger bottles should be cooled without touching each other to allow heat dissipation eliminating syrup darkening due to stack burn
* Bottles should be filled most of the way up the neck to allow for syrup contraction when cooling.

Labeling and Shipping

* Labels need to be put on straight and with consistent positioning
* A batch code needs to be placed on the bottom of the bottle referencing the barrel which is keyed to production data on record
* Bottles to be shipped in the boxes they came in; sealed with packing tape around the entire box.
* Be sure bottles are not sticky. Syrup on the outside needs to be washed off.

Provided by (and for more information please contact) Tom Hammett [himal@vt.edu](mailto:himal@vt.edu)