

F: MAPLE PRODUCTS (310 CLAUSE 7.2)

CANADIAN ORGANIC STANDARDS*

COG'S GUIDE TO THE STANDARDS

7.2 MAPLE PRODUCTS

7.2.1 “The standards for maple production also apply to syrup production in other tree types, such as birch.”

7.2.1 Because it is also possible to produce syrup from birch sap and walnut tree sap, the same standards that regulate the production of maple syrup must apply. This includes clauses relating to equipment, cleaning products and guidelines regarding protection of the environment.

7.2.2 “Organic maple products shall be from production units managed in accordance with this standard.”

7.2.2 It is essential to ensure that neighbouring properties cannot contaminate the maple stand that is being managed organically. A protective buffer is required if there is no existing barrier to prevent contamination from an adjacent field where prohibited substances may have been spread. Potential barriers include windbreaks and a band of conifers. Sap from the 8-metre buffer zone cannot be used to produce certified organic products.

7.2.3 “This standard applies to all stages of production and preparation--the maintenance and development of the sugar bush, collecting and storing sap, converting sap to syrup, making products out of syrup, washing and sterilizing equipment, and storing finished products.”

7.2.3 Certain procedures are prohibited in the production of organic maple syrup because they will significantly alter the finished product. For example, the use of an air injector is not permitted. Air may not be injected into the sap, the concentrate, the reduction or the syrup to avoid contamination (because the air itself might be contaminated). This same procedure is not permitted in the evaporator pans because it produces an oxidation reaction which lightens the colour of the syrup.

Use of an air blower system in the steam pans is also prohibited because of the risk of incorporating contaminated air into the sap during the evaporating process. These examples illustrate the care required to produce non-denatured syrup with a rich, characteristic maple flavour.

7.2.4 “The production of maple syrup shall be characterized by good management practices of the sugar bush and its ecosystem. Development and maintenance shall focus, over the long term, on

7.2.4 The forest that makes up the maple bush is a fragile environment. In organic maple production, the forest manager must protect the resource by avoiding, for example, the use of heavy machinery in the bush when the soil is wet because the resulting deep ruts could damage tree roots. Autumn is a good time for forest

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preservation of the sugar bush ecosystem and improvement of tree vigour.”

7.2.5 “Tapping practices shall minimize risk to the health and longevity of the trees.”

7.2.6 “Equipment and techniques used to collect and store sap shall lead to a prepared product of the highest possible quality. Equipment shall be in good condition, shall be composed of materials suitable for use in the manufacture of food products, and shall be used according to the manufacturer's instructions.”

7.2.7 “During conversion of sap to syrup, the sap can take on the odour of anything it comes into contact with. Therefore, care shall be taken to avoid denaturing the product during preparation. The use of technology, such as magnetization, that is likely to alter the intrinsic qualities of the product is prohibited.”

7.2.8 Transition

“This standard shall be fully applied on a production unit for at least 12 months before the harvest of sap may be considered organic. Prohibited substances shall not have been used for at least 36 months preceding the first harvest. Parallel production is prohibited.

NOTE: Part 13 Organic Products of the Safe Food for Canadians Regulations requires that the application for the organic certification of maple products be filed at least 15 months before the day on which the food is expected to be sold. During that period of time, compliance with this standard will be assessed by the certification body and this assessment must include at least one inspection of the production unit, during production, in the year before maple products may be eligible for certification and one inspection, during production, in the year maple products are eligible for certification.”

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management work because the bark is less fragile and less subject to damage (trunk, branches and roots).

7.2.5 When tapping practices, ensure that the tap holes are not too deep. Spouts (spigots, taps or spiles) should not be inserted using force. This will help prevent the bark or even the tree from splitting during periods of extreme cold. When removing taps, care must be taken to prevent damaging the bark; it is preferable to remove the spout by rotating it once in the tap hole. If a spout remover is required, remove the spout using small pulls rather than one big pull.

7.2.7 The organic maple producer is committed to producing an unadulterated product that preserves the qualities expected from organic maple syrup and its by-products. That is why certain technologies are not permitted, such as the use of anodes that magnetize maple water (which may alter the intrinsic qualities of the maple product).

7.2.8. Contrary to popular belief, maple syrup is not organic simply because it comes from the woods. Between collection and packaging, there are many contamination risks. Also, in organic management, the resource must also be preserved.

Finally, as with all other kinds of organic production, a one-year waiting period is required before the first certification to demonstrate a good understanding and mastery of the method and standards of organic production.

There is a mandatory 36-month waiting period to ensure that synthetic products applied in the past have been eliminated.

*Organic production systems: general principles and management standards. CAN/CGSB-32.310-2020. Canadian General Standards Board. Dec. 2020. www.publications.gc.ca/site/eng/9.854643/publication.html.

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7.2.9 Sugar bush development and maintenance

7.2.9.1 Plant diversity

“The operator shall encourage species diversity in the sugar bush, in particular, companion species to the sugar maple. Companion species should represent a minimum of 15% of the volume of wood within the sugar bush. If companion species represent less than 15%, their growth shall be encouraged. Systematic clearing of undergrowth and brush is prohibited, even if growth is abundant. However, vegetation may be removed to clear paths and to facilitate movement.”

7.2.9.2 Thinning

“When it is necessary or when required by the forest administrator, thinning of the sugar bush shall be performed according to current good management practices, both public and private, and shall be evenly distributed throughout the sugar bush.”

7.2.9.3 Tree protection

“If livestock (for example, beef or dairy cattle, pigs or domestic deer) could harm sugar trees, livestock access to the bush is prohibited in order to preserve plant diversity and the growth of young trees. Pipeline networks shall be installed in a manner that shall not injure nor harm the growth of trees.”

7.2.9.4 Fertilization

“Fertility recommendations and applications shall be based on observed, diagnosed and documented deficiencies. Soil amendments permitted for maple production include wood ash, agricultural lime and fertilizers listed in Table 4.2 (Column 1) of CAN/CGSB-32.311.”

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7.2.9.1 It is common to find maple stands that are made up of mostly maple trees. This weak biodiversity is often the result of several years of forest management that favour maple trees to the detriment of all other species of trees. When converting to an organic system, it is essential to re-establish companion species. Over the years, it is possible to establish 15% of the forest volume in species other than maple. Foresters describe the volume of wood in terms of basal area. In the case of very diversified stands, at least 15% of companion species must be preserved during thinning operations.

Abundant shrub vegetation must not be completely cleared because of its role in conserving moisture and protecting the soil. However, clearing a one-metre band, for example, on either side of the main and lateral tubing (5/16) is permitted; this creates corridors for moving around and carrying out work, such as tapping, finding leaks and cleaning tubing.

7.2.9.2 Avoid damaging trees during forest management. Injuring tree trunks as well as damaging roots from deep ruts is prohibited. Protecting the resource is a priority. Anyone working in an organic maple bush must be well informed.

7.2.9.3 Ensure that support wires do not penetrate and strangle the trees. Guy wires and fasteners at the extremities of drop line tubes must not damage the trees.

7.2.9.4 The list of accepted supplements and fertilizers in organic maple production is very short: Not many products are permitted. The list of substances in Table 4.2 Column 1 of CAN/CGSB-32.311 must be carefully consulted to ensure that any product being spread is permitted. An assessment of the health of the sugar bush

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7.2.9.5 Pest control

“Knowledge and understanding of pests (in the sugar bush and preparation facility), their habits, and solutions that maintain the bush ecosystem, are the preferred basis for pest control. Within the sugar bush, substances listed in Table 4.2 (Column 2) of CAN/CGSB-32.311 are permitted for control of pests including diseases and insects. Within preparation facilities, mechanical and sticky traps are permitted for rodents and other destructive pests, as are natural repellents listed in Table 8.2 of CAN/CGSB-32.311. If an infestation occurs, vertebrate pests may be hunted. It is prohibited to use poisons of any kind to control vertebrate pests.”

7.2.10 Tapping

7.2.10.1 Tree diameter and number of taps

“Table 7 indicates the maximum number of taps a healthy maple can support, based on its chest height diameter (CHD); CHD is the diameter measured at a height of 1.3 m (4.3 ft) above the soil surface. A tree shall not have more than three tap holes.”

Table 7- Maximum number of taps per healthy maple tree

Diameter measured at a height of 1.3 m (4.3 ft) above the soil surface	Maximum number of taps
Less than 20 cm (8 in.)	0
20 to 40 cm (8 to 16 in.)	1
40 to 60 cm (16 to 23.6 in.)	2
60 cm (23.6 in.) or greater	3

7.2.10.2 Depth and diameter of tap holes

“Depth of tap holes shall be no more than 5 cm (1.9 in.) from the surface of the bark for trees with a

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may be carried out. Using forestry data and soil analysis, a qualified professional can indicate causes of decline and suggest effective interventions.

7.2.9.5 Hunting and trapping nuisance animals are permitted when nuisance animals are causing problems. Use of poison in buildings or in the bush is prohibited, including to control rodents (e.g., squirrels) or any other kind of animal.

7.2.10.1 The diameter of a maple tree is measured 1.3 m from the forest floor. If the forest floor is covered with snow, the measurement is still made from the level of the soil. Before they may be tapped, trees must have a minimum diameter of 20 cm (8 in.) or a circumference of 63 cm (25 in.); the circumference can be easily measured with a tape measure.

For a second tap, the maple must have a diameter of 40 cm (16 in.) or a circumference of 126 cm (50 in.).

For a third tap, the diameter must be 60 cm (23.6 in.) or the circumference 189 cm (74 in.).

7.2.10.2 When the maples are visibly unhealthy, operators must reduce the stress caused by the tapping

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diameter smaller than 25 cm (9.8 in), or 6 cm (2.4 in.) from the surface of the bark for trees with a diameter equal or higher than 25 cm (9.8 in). Diameters shall not be greater than 7.93 mm (5/16 in). If a tree is diseased, infested with other pests, decaying, or if tap holes are not healing properly, stricter standards shall be implemented:

a) The number of taps per tree shall be reduced to 2 where 7.2.10.1 allows 3, and 1 where 2 are allowed.

b) When the chest height diameter is less than 25 cm (~9 7/8 in.), tapping is prohibited.

If the trees are compromised by injury, insects, diseases or decay, Table 7 of 7.2.10.1 may be used in accordance with the standard, however, spouts with a smaller diameter shall be used or operators shall abstain from tapping.”

7.2.10.3 Disinfection of tap holes and tapping equipment “Food-grade ethyl alcohol may be sprinkled onto spouts and drill bits during tapping, but sprinkling in tap holes is prohibited. It is prohibited to use any other germicide, such as denatured alcohol (a mixture of ethanol and ethyl acetate) or isopropyl alcohol, in tap holes and on tapping equipment.”

7.2.10.4 Renewing the tap and removal of spouts “Maple trees shall only be tapped once a year. The practice of retapping a previously tapped tree during the same season or double tapping is prohibited. To allow trees to heal, spouts shall be removed no later than 60 days after the final, seasonal sap flow. Maple trees shall only be tapped during the sugar bush operation period (maple syrup season). Fall syrup production is prohibited.”

7.2.11 Collection and storage of maple syrup

7.2.11.1 Spouts

“Spouts shall be made of food-grade materials.”

7.2.11.2 Vacuum collection system

“All parts of the collection system that may come in contact with sap shall be made of materials suitable

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operation. Stricter tapping standards are required; this is achieved by reducing the number of taps per tree and increasing the minimum diameter of the tree that can be tapped.

No more than two taps may be used on a maple that is clearly unhealthy.

7.2.10.3 No germicidal product can be put in the tap hole. However, operators can clean the spout and the drill bit when tapping. For this step, the only authorized product is food-grade ethyl alcohol. It is prohibited to clean the spout and the drill bit with denatured alcohol, isopropyl alcohol or any other cleaning or disinfecting product.

7.2.10.4 You can only tap a maple tree once in a 12-month period. You cannot deepen or widen a cut. You cannot drill a second tap hole elsewhere on the trunk. When the season is over, spouts must be removed from the notches. Spouts must be removed within 60 days after the last sap flow.

7.2.11.2 Tubing in the bush must be made of food-grade material. The same applies to tubing within the buildings.

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for use in the manufacture of food products. Pumps shall be well-maintained and used oil shall be collected and disposed of so as to not contaminate the environment.”

NOTE: “It is recommended to recycle all materials of the components of the collection system.”

7.2.11.3 Storage

“All equipment that may come into contact with sap or its concentrate and filtrates, such as storage tanks, connections and transfer systems, shall be made of materials suitable for use in the manufacture of food products. This also applies to any surface coatings, such as paints and soldered joints. The use of air injection systems with a forced air blower in sap before, during or after its conversion to syrup is prohibited.”

7.2.11.4 Collecting with buckets

“Pails or buckets may be made of aluminum or plastic. Galvanized steel is prohibited. Buckets shall be covered with a lid. The standards that apply to storage tanks also apply to reservoirs used to transport collected sap.”

7.2.12 Conversion of sap to syrup

7.2.12.1 Sap filtration

“Sap shall be filtered before processing. The filtration shall not compromise the sap's inherent qualities.”

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Use of ABS, galvanized steel, green sewer cylinders and recycled piping is prohibited.

Oil from vacuum pumps must not be released into the environment. An oil recovery system must be implemented for the type of dairy type pump (De Laval, Airablo, Surge, Universal etc.).

7.2.11.3 Plastic holding tanks must be made of food-grade material. Fibreglass, galvanized steel and cement holding tanks must be finished with a coating, gel or paint that is food grade. The solder used in stainless steel holding tanks must be lead-free. Certain techniques used in conventional production are unacceptable under organic management, in particular air injection (because the air is not sufficiently filtered and purified). There is a risk of contamination by this air supply. It is therefore not allowed to blow air with a blower in the sap or concentrate.

7.2.11.4 Buckets must be covered. Bucket covers may be made of plastic or galvanized steel because these do not come in contact with the sap.

Containers for transportation may be made of:

- food-grade plastic; • stainless steel; • aluminum; or
- fibreglass painted with a food-grade coating.

They may not be made of galvanized steel or plastic which is not food grade.

White plastic 1000-litre (220-gal.) tanks covered with wire mesh are not necessarily made of food-grade material. It is essential to ensure that they are made of food-grade material. If the material is food-grade but previously used, it is essential to check what was stored in it previously to prevent contamination of the sap by residues that are unacceptable in organic production.

7.2.12.1 Maple sap must be filtered at least once. For a system using buckets, it may be filtered when filling gathering tanks in the bush. It may also be filtered when poured into pans in the sugar house.

When using a tubing system, the sap may be filtered when leaving the releaser or when it is transferred to a holding tank.

If using a reverse osmosis system, the pre-filter on the osmosis system is an acceptable filtration process.

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7.2.12.2 Sap sterilization

“Sterilization of sap with ultraviolet radiation or by adding a sterilizer prior to conversion is prohibited.”

7.2.12.3 Osmosis extraction and membranes

“Sap may be concentrated via reverse osmosis. Only reverse osmosis and nano-filtration (ultra-osmosis) membranes are allowed. In the off-season, osmosis membranes shall be stored in filtrate, or potable water, in a hermetically sealed container and kept in a frost-free location. Sodium metabisulfite (SMBS) or potassium metabisulfite (PMBS) may be added to the filtrate or potable water to prevent mould growth. If SMBS or PMBS is used, the membrane shall be rinsed before the next use with a volume of water equal to the hourly capacity of the membrane (for example, 2271 L (600 gal.) of water for a 2271 L/h (600 gal./h) membrane). Off-site storage of the membrane (for example, by the membrane supplier) shall be documented. Food-grade lubricants are allowed as a lubricant for equipment used in maple production.”

7.2.12.4 Evaporator

“Evaporator pans shall be made of stainless steel. They shall be tungsten-inert gas (TIG) welded or soldered with tin-silver solder. Pans made of galvanized steel, copper, aluminum or tin-plated steel are prohibited. Air and environmental quality shall be controlled in the evaporator room. Air injection systems with a forced air blower are prohibited in evaporator pans.”

7.2.12.5 Defoamers

“Only plant-based organic anti-foaming products that have not been chemically altered are permitted. Examples include Pennsylvania maple wood (*Acer*

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7.2.12.2 It is prohibited to sterilize maple sap using an ultraviolet treatment system. Ionizing maple sap or using any other procedure intended to reduce the accumulation of nitre (sugar sand) on the sides of pans is also prohibited.

7.2.12.3 Between seasons, membranes may be stored in a storage container or their metal post. The membrane may be stored dry, in a small quantity of water or filtrate to preserve humidity or even be immersed in potable water or filtrate. A solution of SMBS (sodium metabisulfite) may then be added to prevent mould growth. Use of a glycol-type antifreeze is prohibited.

At the start of the following season, if SMBS was used, membranes must be rinsed. The volume of potable water required for rinsing is equivalent to the capacity of the membrane. For example, for a reverse osmosis unit that has two membranes, each with a capacity of 2268 litres (600 US gal.), 4536 litres (1200 US gal.) of potable water are required for rinsing.

If membranes are cleaned and stored elsewhere by another business, a written description of the work carried out and a list of the products used must be provided.

7.2.12.4 Evaporator pans must be made of stainless steel and the solder must be lead-free.

Permitted fuels include fire wood, wood pellets, wood chips, grades 1 and 2 heating oil, propane and natural gas. Other materials, such as waxed cardboard pellets, can be used as fuel as long as the operator can demonstrate that the fuel does not affect the integrity of the maple syrup. Evaporation using electric or steam heating is permitted. A special permit issued by the Federal Government is required to burn used oil.

Blowing with an air blower air into the pans using an air injector system or through the use of a steam pan is prohibited.

7.2.12.5 Organic vegetable oils have a moderate anti-foaming capacity, therefore, in order to compensate, the heat must be reduced. By reducing the heat, the foaming

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pennsylvanicum, also known as striped maple or moosewood) and organic vegetable oils, except those with allergenic potential.”

7.2.12.6 Syrup filtration and other treatments

“Organic maple syrup shall not be refined by artificial means, bleached or lightened in colour. Any manipulation on maple syrup carried out in order to mask defects in flavour, mainly that of the bud, is prohibited. Simple filtration via the following methods is permitted: through cloth or paper, a filter press or calcined diatomaceous earth; or use of silica powder or clay dust with a filter press to remove suspended solids. The use of air injection systems with a forced air blower in maple syrup is prohibited.”

7.2.13 Cleaning of equipment for use in syrup production

7.2.13.1 Maple sap collection systems, tubing and tanks

“Cleaning shall take place before or after each production season. Permitted sanitation substances include:

In-season	For all equipment except tubing	“-Sodium hypochlorite -Product based on acetic acid, hydrogen peroxide or peracetic acid (followed by rinsing with drinking water or filtrate)”
Off-season	For all equipment including tubing	“-Sodium hypochlorite -Fermented sap -Product based on acetic acid, hydrogen peroxide or peracetic acid Cleaning must be followed by rinsing with drinking

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decreases and the organic vegetable oils will have the desired effect.

Avoid using oils that have allergenic potential. The nine priority food allergens in Canada are peanuts, nuts, sesame seeds, milk, eggs, seafood (fish, crustaceans and molluscs), soya, wheat and sulphites (see the CFIA website).

Kosher defoaming granules and mono- and di-glyceride propylene glycol-based defoaming liquids are prohibited.

7.2.12.6 Filtration using equipment that alters the properties of maple syrup is prohibited. Filtration must only remove suspended solids.

When filtering with a filter press, use of a food-grade powder, such as diatomaceous earth, silica or clay dust, is permitted.

7.2.13.1 Since potable water or filtrate is used in the sugar house, these may be used for cleaning purposes during the season. A solution of sodium hypochlorite or peroxide may also be used followed by rinsing with potable water or filtrate.

There is no cleaning product permitted for use on tubing during the season. Only potable water or filtrate is permitted.

Between production seasons, the collection network may be cleaned with potable water, filtrate, fermented sap, a basic solution of sodium hypochlorite or peroxide or isopropyl alcohol. Cleaning may be done by suction, backwash or injection with a syringe without vacuum or pressure. Brushes and sponges are permitted.

Rinsing is always necessary when using a cleaning solution. Rinsing must be done with potable water or by discarding the first sap flow of the season.

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		water, filtrate or sap before the next season.”
	For tubing only	“-Isopropyl alcohol Cleaning must be followed by rinsing with drinking water, filtrate or sap before the next season.”
Other substances, including those based on phosphoric acid, are prohibited.”		

7.2.13.2 Osmosis extraction and membranes

“Reverse osmosis units and membranes shall first be cleaned using filtrate, according to the time and temperature recommended by the manufacturer.

a) “Cleaning during the production season:

1) “If after rinsing with warm filtrate (in an open or closed circuit), a Pure Water Permeability (PWP) test indicates that controlled efficiency is less than 85% of the controlled efficiency recorded at the beginning of the season, a caustic soda-based soap (NaOH) recommended by the manufacturer for membrane cleaning is permitted.

2) “If PWP test results stay below 75% of the efficiency recorded at the beginning of the season after the use of a NaOH-based soap, citric acid is permitted.

3) “Cleaning or a cleaning sequence with substances permitted in 7.2.13.2 a 1) and 2) shall be followed by a rinse with clean filtrate or potable water. The rinse volume shall be greater than or equal to 40 times the dead (residual) volume of the unit (total volume of the unit and its components after it is drained).

4) “Daily efficiency readings and calculations shall be recorded. Membrane flush water shall be disposed of in a manner that does not harm the environment.

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Dry cleaning is also possible. This is carried out by draining the network and drying it by vacuum or using sponges. In this case, no product is used. All other cleaning products are prohibited for tubing.

7.2.13.2 Cleaning reverse osmosis units and membranes is carried out using filtrate at the end of a period of condensing. This cleaning must be followed by a simple, two-minute Pure Water Permeability (PWP) test.

If the efficiency is equal to or above 85% in relation to the efficiency recorded at the beginning of the season, the unit can not be cleaned with an alkaline soap. If, after this cleaning with filtrate, the efficiency remains below 85% with the PWP test, use of an alkaline soap is permitted. If, following this cleaning with an alkaline soap, efficiency remains below 85% with the PWP test, use of citric acid is permitted.

At the end of the season, apart from alkaline soap and citric acid, a solution of acetic acid, peracetic acid and hydrogen peroxide (e.g., Oxysan) is permitted. Once alkaline soap, citric acid, or a solution of acetic acid, peracetic acid and hydrogen peroxide has been used, the system must be rinsed with potable water or filtrate.

The volume of water for rinsing must be 40 times the volume of the cleaning solution contained in the reverse osmosis unit and its parts, including the membranes.

If the unit does not drain, this volume could be greater. If, on the other hand, the membrane and filters are drained, the required rinse volume will be much lower. For example, some units may contain 5 times less cleaning solution when they are drained (dead volume residual), compared to the volume when they are not drained (dead volume). In this case, the rinse volume will be greatly reduced.

PWP test results must be recorded in the test log with a description of operations related to the reverse osmosis unit. If PWP tests are not carried out, no cleaning

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b) "Cleaning after the production season: Off-season treatment of membranes with citric acid is permitted. Following the citric acid treatment, the use of acetic acid, peracetic acid, and hydrogen peroxide is permitted."

7.2.13.3 Evaporators

"At any time, evaporators may be cleaned with potable water or filtrate adding, if necessary, acetic acid or products based on acetic acid, hydrogen peroxide or peracetic acid."

Fermented sap may also be used at the end of the season. Double rinsing is mandatory if acetic acid, or if products based on acetic acid, hydrogen peroxide or peracetic acid, are used. The second rinsing shall be done with hot water, hot filtrate or hot sap."

7.2.13.4 Prohibited substances

"Substances other than those specified in 7.2.13.1, 7.2.13.2 and 7.2.13.3 are prohibited, including those with phosphoric acid content."

7.2.14 Food additives and processing aids

"Transformation of syrup into maple products (for example, maple butter, sugar and taffy) shall comply with this standard. Boiling with microwaves is prohibited. No other substances shall be added to syrup or maple products during production or preparation, whether to improve the taste, texture or appearance. Cones may be used if they constitute less than 5% of the weight of the final product."

7.2.15 Transport, storage and conservation

"Maple syrup not intended for immediate consumption shall be stored in food-grade containers that do not alter the chemical composition or quality of the syrup. Permitted

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products are permitted for use during the season. Membranes will only be cleaned with filtrate or potable water. Once the season has ended, alkaline soap, the acids and hydrogen peroxide may be used for cleaning.

When new membranes have been purchased, they must be cleaned with alkaline soap and rinsed before being used to concentrate maple sap. New membranes are often protected with a substance that will remain in the first syrup if the membranes are not first cleaned with an alkaline cleaner. Before reusing membranes that have been cleaned by a manufacturer, they must be rinsed well.

7.2.13.3 To dislodge the sugar sand (nitre), it is allowed to use potable water, filtrate or a solution based on acetic acid. If cleaning is required for a microbial problem, the use of a peroxide solution is permitted. After acetic acid or peroxide is used, a thorough rinse is required. Once the season is over, vinegar or fermented sap may be used. No other types of products are permitted.

7.2.14 Defoaming products used when heating syrup to make other maple products must conform to section 7.2.12.5.

The flavour of vegetable oil is not desirable in a maple product; by lowering the intensity of the heat it is possible to reduce the amount of foam and use of defoamers.

7.2.15 Use of galvanized steel barrels is prohibited. Also, use of steel barrels without a food-grade coating on the inside is prohibited.

"Single-use" barrels may only be used once.

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containers include barrels made of stainless steel, fibreglass, food-grade plastic or metal with an interior food-grade coating. Reusing single-use barrels is prohibited. Barrels shall carry a unique identification number that is used in all related records. The barrel fill-date shall be recorded.”

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Record keeping is obligatory. Logs must be kept for five years. They must contain an account of all the barrels produced and retail sales of syrup batches. Filling dates for these containers are to be recorded in the log.

**Organic production systems: general principles and management standards*. CAN/CGSB-32.310-2020. Canadian General Standards Board. Dec. 2020. www.publications.gc.ca/site/eng/9.854643/publication.html.

**See the Q&As from the Standards Interpretation Committee at organicfederation.ca/final-questions-and-answers-canadian-organic-standards.