

Canadian Honey Industry Melter/Baker's Honey Standard

1.0 Background

Melter/baker's honey is produced in Canada; however there are no defined standards for its production, blending or use. Currently, information is limited regarding the product's safety and best handling practices. It is also important that melter/baker's honey is appropriately identified in trade and at the retail level so it is not confused with extracted Canadian honey.

2.0 Purpose

- To develop a Good Management Practice (GMP) that will reduce the risks/concerns associated with the production, processing and storage of melter/baker's honey.
- To define the compositional criteria for melter/baker's honey.
- To determine appropriate labelling requirements for melter/baker's honey.
- To clarify how melter/baker's honey can be marketed.

3.0 Definitions

Adulteration of Honey

Honey is considered adulterated when foreign sugars are added, (e.g., C4 sugars such as corn syrup/cane sugar or C3 sugars such as rice/beet).

Diastase

Diastase is an enzyme found in nectar and is also added by the honey bee during the collection and ripening of nectar. Diastase appears to be present in varying amounts in nearly all honey. Long storage at moderate temperatures and exposure to high temperatures will inactivate diastase in honey.

HMF

HMF (5-hydroxymethylfurfuraldehyde) measurement is used to evaluate the quality of honey; generally not present in fresh honey, its content increases during preparation.

Traditionally, HMF and diastase levels have been used to assess the freshness of honey and to measure heat damage.

Melter/Baker's Honey

Honey derived from melting beeswax or overheated through processing.

4.0 Hazards or Concerns

4.1 Chemical Hazards

Chemical hazards refer to the presence of veterinary drugs, pesticides, heavy metals and/or environmental contaminants.

4.2 Physical Hazards

Physical hazards refer to the presence of wood, metal, glass, hard plastic and other materials that could result in a health concern.

4.3. Biological Hazards

Biological hazard would include the contamination with spore-forming bacteria at all stages of production.

4.4 Adulteration with Foreign Sugars

Honey and/or melter/baker's honey would be considered adulterated when foreign sugars are added (e.g., C4 sugars such as corn syrup/cane sugar, C3 sugars such as rice/beet).

5.0 Current Regulatory Requirements

All honey, including melter/baker's honey, sold in Canada must comply with:

- *Food and Drugs Act - Sections 4 and 7*
- *Food and Drug Regulations Division 15 and 18*
- *Honey Regulations*

6.0 Good Manufacturing Practice

The practices listed below are based on current knowledge and will help to contribute to the production of melter/baker's honey that will meet regulatory requirements listed in Section 5. These practices may be reviewed and modified as new information is acquired.

6.1 Separate Honey Derived From Wax Melting and Extracted Honey

It is recommended that melter/baker's honey be kept separate from extracted honey at the production stage.

Rationale: It would be difficult for producers to track the HMF and diastase levels in any blended product, which may then increase the HMF level and reduce diastase levels of extracted honey which could impact safety, composition and buyer specifications.

6.2 Broodcomb Wax Melting

It is recommended that honey derived from melting wax from broodcomb is not saved.

Rationale: The honey derived from melting broodcomb could be contaminated with veterinary drugs, pesticides, and/or other chemical residues, as well as be adulterated with foreign sugars. In addition, melting of broodcomb could contaminate honey derived from melting non-brood wax frames.

6.3 Storing and Handling Wax before Melting

All honey/wax mixtures that are saved for melting at a later date must be stored in drums/containers that meet the honey drum standards.

Rationale: The drums/containers are suitable for food storage; and are sealed, stored and handled in a clean facility that does not risk any exposure to biological, chemical or physical hazards.

6.4 Handling of Melter/Baker's Honey (During and After Wax Melting)

Melter/baker's honey is a food and needs to be handled in such a manner.

Rationale: Melter/baker's honey is subject to the same requirements as extracted honey when it comes to food safety hazards; this includes the drums/containers used for storage. As with the production of any honey, care must be taken in the production of melter/baker's honey so that hazards are not introduced during and after wax melting.

6.5 Compositional Criteria for Melter/Baker's Honey

Melter/Baker's honey:

- would have the same composition requirements as extracted honey, except for HMF and diastase;
- would not be adulterated with foreign sugars;
- would meet all food safety requirements (e.g., no residues of veterinary drugs, pesticides, heavy metals or physical hazards);
- would have no more than 20% moisture;
- may have a foreign taste or odour; and
- may have been overheated.

6.6 Labelling Requirements

All honey derived from wax melting must have a common name of “melter honey” or “baker’s honey”. This is important to distinguish between this type of honey and extracted honey.

Melter/Baker’s honey must not bear the Canada grade name or colour declaration.

Melter/Baker’s honey must not have a floral source description.

All other federal/provincial labelling requirements apply.

6.7 Blending of Melter/Baker’s Honey with Extracted Honey

The blending of melter/baker’s honey is subject to the current *Honey Regulations* Section 8 (d):

- (i) a diastase activity, determined after processing and blending, as represented by a diastase figure on the Gothe scale of not less than eight where the hydroxymethylfurfural content is not more than 40 mg/kg, or
- (ii) a diastase activity, determined after processing and blending, as represented by a diastase figure on the Gothe scale of not less than three where the hydroxymethylfurfural content is not more than 15 mg/kg.

6.8 Marketing Options for Melter/Baker’s Honey

There are various options for marketing melter/baker’s honey meeting the compositional criteria as indicated in Section 6.5 and labelling as indicated in Section 6.6. These include, but may not be limited to, sale to:

- a packing or pasteurizing honey establishment for the preparation of graded honey provided the graded honey meets the requirements of the *Honey Regulations*; or
- a manufacturer engaged in preparing melter/baker’s honey as a sweetening ingredient or for using the melter/baker’s honey as an ingredient in a prepared food product; or
- a consumer pack provided that the melter/baker’s honey is clearly identified and does not bear a Canada grade mark; or
- a manufacturer of a non-food product provided that respective regulatory requirements are met.

It is the responsibility of the producer to meet the standard and all regulatory requirements.

6.9 References

CODEX Standard for Honey CODEX STAN 12-1981 -

<http://www.codexalimentarius.org/standards/list-of-standards/en/?provide=standards&orderField=fullReference&sort=asc&num1=CODEX>

Food and Drugs Act <http://laws-lois.justice.gc.ca/eng/acts/F-27/>

Food and Drug Regulations -

http://lawslois.justice.gc.ca/eng/regulations/C.R.C.,_c._870/index.html

Food Labelling and Advertising Guidelines -

<http://www.inspection.gc.ca/food/labelling/eng/1299879892810/1299879939872>

Honey Industry Bulk Container Standard - <http://www.honeycouncil.ca/industry.php>

Honey Regulations - <http://laws->

[lois.justice.gc.ca/eng/regulations/C.R.C.,_c._287/index.html](http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._287/index.html)

Official Journal of the European Communities Council Directive 2001/110/EC of 20 December 2001 relating to honey - <http://eur->

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0110:en:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0110:en:NOT)