

CANADA GAZETTE, PART II

FOOD AND DRUG REGULATIONS - AMENDMENTS

WILL BE PUBLISHED IN CANADA GAZETTE, PART II OF APRIL 20, 2005

SCHEDULE NO. 1367 (IMIDACLOPRID)

P.C. 2005-488 OF APRIL 5, 2005

SOR/2005-82 OF APRIL 5, 2005

Her Excellency the Governor General in Council, on the recommendation of the Minister of Health, pursuant to subsection 30(1)¹ of the *Food and Drugs Act*, hereby makes the annexed *Regulations Amending the Food and Drug Regulations (1367 - Imidacloprid)*.

¹S.C. 1999, c. 33, s. 347

REGULATIONS AMENDING THE FOOD AND DRUG REGULATIONS (1367 -
IMIDACLOPRID)

AMENDMENT

1. The portion of item I.2.1 of Table II to Division 15 of Part B of the *Food and Drug Regulations*² in columns III and IV is replaced by the following:

	III	IV
Item No.	Maximum Residue Limit p.p.m.	Foods
I.2.1	6	Tomato paste
	3.5	Brassica crops, lettuce
	3	Sour cherries, sweet cherries, tomato purée
	1.5	Grapes
	1	Blueberries, citrus fruits, peppers, tomatoes
	0.6	Pears
	0.5	Apples, cucumbers
	0.3	Potatoes
	0.2	Mangoes
	0.08	Eggplants
	0.05	Cottonseed oil, field corn grain, mustard seed, pecans, rapeseed (canola), sweet corn kernel plus cob with husks removed

COMING INTO FORCE

2. These Regulations come into force on the day on which they are registered.

² C.R.C., c. 870

REGULATORY IMPACT ANALYSIS STATEMENT

(This statement is not part of the Regulation)

Description

Imidacloprid is registered under the *Pest Control Products Act* as an insecticide for the control of aphids, Colorado potato beetles, flea beetles, fruit flies and other insect pests on apples, blueberries, cherries, greenhouse cucumbers, lettuce, potatoes and tomatoes as a post-emergent treatment. It is also registered for use as a seed treatment for mustard and rapeseed (canola). Maximum Residue Limits (MRLs) have been established under the *Food and Drugs Act* for residues of imidacloprid and its metabolites containing the 6-chloropicolyl moiety resulting from these uses at 6 parts per million (ppm) in tomato paste, 3.5 ppm in lettuce, 3 ppm in sour cherries, sweet cherries and tomato purée, 1 ppm in blueberries and tomatoes, 0.5 ppm in apples and cucumbers, 0.3 ppm in potatoes and 0.05 ppm in mustard seed and rapeseed (canola), and at 3.5 ppm in brassica crops, 1.5 ppm in grapes, 1 ppm in citrus fruits and peppers, 0.6 ppm in pears, 0.2 ppm in mangoes, and 0.05 ppm in cottonseed oil and pecans imported into Canada. By virtue of subsection B.15.002(1) of the *Food and Drug Regulations*, the MRL for other foods is 0.1 ppm.

The Pest Management Regulatory Agency (PMRA), of Health Canada, has recently approved applications to amend the registration of imidacloprid in order to allow its use for the control of Colorado potato beetle on eggplants as a preplant soil incorporated treatment or as a foliar treatment; and for the control of corn flea beetle and wireworms on field corn and sweet corn as a seed treatment. This regulatory amendment will establish MRLs for residues of imidacloprid and its metabolites containing the 6-chloropicolyl moiety resulting from these uses in eggplants, field corn grain (the kernels of field corn) and sweet corn kernel plus cob with husks removed, in order to permit the sale of food containing these residues.

Before making a registration decision regarding a new use of a pest control product, the PMRA conducts the appropriate assessment of the risks and value of the product specific to its proposed use. The registration of the pest control product will be amended if: the data requirements for assessing value and safety have been adequately addressed; the evaluation indicates that the product has merit and value; and the human health and environmental risks associated with its proposed use are acceptable.

The human health risk assessment includes an assessment of dietary risks posed by expected residues of the pest control product, as determined through extensive toxicological studies. An acceptable daily intake (ADI) and acute reference dose (ARfD) is calculated by applying a safety factor to a no observable adverse effect level or, in appropriate cases, by applying a risk factor which is calculated based on a linear low-dose extrapolation. The potential daily intake (PDI) is calculated from the amount of residue that remains on each food when the pest control product is used according to the proposed label and the intake of that food from both domestic and imported sources in the diet. PDIs are established for various Canadian subpopulations and age groups, including infants, toddlers, children, adolescents and adults. Provided the PDI does not exceed the ADI or ARfD for any subpopulation or age group, and the lifetime risk is acceptable, the expected residue levels are established as MRLs under the *Food and Drugs Act* to prevent the sale of food with higher residue levels. Since, in most cases, the PDI is well below the ADI and lifetime risks are very low when MRLs are originally established, additional MRLs for the pest control product may be added in the future.

After the review of all available data, the PMRA has determined that MRLs for imidacloprid, including its metabolites containing the 6-chloropicolonyl moiety, of 0.08 ppm in eggplants, and 0.05 ppm in field corn grain and sweet corn kernel plus cob with husks removed would not pose an unacceptable health risk to the public.

Alternatives

Under the *Food and Drugs Act*, the sale of food containing residues of pest control products at a level less than or equal to 0.1 ppm is permitted unless a lower MRL has been established in Table II, Division 15, of the *Food and Drug Regulations*. In the case of imidacloprid, establishment of MRLs for eggplants, field corn grain and sweet corn kernel plus cob with husks removed is necessary to support the additional use of a pest control product which has been shown to be both safe and effective, while at the same time preventing the sale of food with unacceptable residues.

Benefits and Costs

The use of imidacloprid on eggplants, field corn and sweet corn will provide joint benefits to consumers and the agricultural industry as a result of improved management of pests. In addition,

this regulatory amendment will contribute to a safe, abundant and affordable food supply by allowing the importation and sale of food commodities containing acceptable levels of pesticide residues.

Some costs may be incurred related to the implementation of analytical methods for analysis of imidacloprid and its metabolites containing the 6-chloropicolyl moiety in the foods mentioned above. Resources required are not expected to result in significant costs to the government.

Consultation

Registration decisions, including dietary risk assessments, made by the PMRA are based on internationally recognized risk management principles, which are largely harmonized among member countries of the Organization for Economic Cooperation and Development. Individual safety evaluations conducted by the PMRA include a review of the assessments conducted at the international level as part of the Joint Food and Agriculture Organization of the United Nations/World Health Organization Food Standards Programme in support of the Codex Alimentarius Commission, as well as MRLs adopted by other national health/regulatory agencies.

This schedule of amendment was published in the *Canada Gazette*, Part I, on September 25, 2004. Interested parties were invited to make representations concerning the proposed amendment. One comment was received which stated that the following MRLs were too low and should be established at more reasonable levels: 0.08 ppm in eggplant, 0.05 ppm in sweet corn and sweet corn kernel plus cob with husks removed, mustard seed, rapeseed (canola), cotton seed and hickory nuts.

In 2001, Canada established an MRL for imidacloprid at 0.05 ppm in mustard seed. In 1999, Canada established an MRL for imidacloprid at 0.05 ppm in cottonseed oil and canola oil (food descriptor was changed to rapeseed (canola) in 2001). Currently, Canada does not have an MRL established for hickory nuts therefore, by virtue of subsection B.15.002(1) of the *Food and Drug Regulations*, the MRL for hickory nuts would be 0.1 ppm

The MRL of 0.08 ppm in eggplants and 0.05 ppm in field corn grain and sweet corn kernel plus cob with husks removed being established through the current regulatory amendment is based on approved application rates for imidacloprid in Canada. Any exporter to Canada who uses a pesticide at application rates and with agricultural practices that would result in residues

exceeding a Canadian MRL can petition the PMRA to establish a different MRL so that higher residue levels would be permitted. The petitioner must submit the necessary information, including a description of the use of the pesticide and relevant data on residue chemistry and levels.

The comments also requested the data and risk assessment methodology used to establish the MRL in Canada. The confidential test data cannot be provided, as they are protected from disclosure under the *Access to Information Act*. Risk assessment methodology used by the PMRA is described in the document Science Policy Notice SPN2000-01, *A Decision Framework for Risk Assessment and Risk Management in the Pest Management Regulatory Agency*, which is available on the PMRA web site (www.hc-sc.gc.ca/pmra-arla/english/pdf/spn/spn2000-01-e.pdf).

Compliance and Enforcement

Compliance will be monitored through ongoing domestic and/or import inspection programs conducted by the Canadian Food Inspection Agency when the MRLs for imidacloprid are adopted.

Contact

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