PHILIPPINE NATIONAL STANDARD

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Maximum Residue Limits (MRLs): Apples Citrus Fruits Grapes Longan Lychee Oranges Pears



PHILIPPINES

BUREAU OF AGRICULTURE AND FISHERIES STANDARDS

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Maximum Residue Limits on Selected Imported Crops

Foreword

Each country has developed its own food regulatory systems from the perspective of consumer and environmental protection resulting in significant differences in regulatory policies and approaches. These diverse regulatory systems may affect trade of goods through non-compliance to food import control requirements such as import maximum residue limits (MRLs) or import tolerances of pesticide residues.

Since 2014, the Philippines' Department of Agriculture has continued its efforts on the establishment of internationally harmonized national standards on pesticide residue. The Technical Working Group (TWG) was amended per Special Order No. 90 series of 2017 to facilitate the adoption of the list of maximum residue limits for selected crops. The project is a collaborative effort of experts from the Bureau of Plant Industry (BPI), Fertilizer and Pesticide Authority (FPA), Philippine Council for Agriculture and Fisheries (PCAF), DA High Value Commodity Development Program (HVCDP), University of the Philippines at Los Baños (UPLB), NFA-Food Development Center (FDC), DOST-Food and Nutrition Research Institute (FNRI), CropLife Philippines, Inc., Crop Protection Association of the Philippines, Inc. (CPAP), Philippine Integrated Crop Management Association (PICMA), and Bureau of Agriculture and Fisheries Standards (BAFS).

These adopted MRLs for selected imported crops is an adoption of the list of harmonized MRLs of pesticide products from the ASEAN MRLs Database. This initial list is subject to regular review and updating by the BAFS. For the residue of pesticides not yet included on the list, Codex MRLs shall apply. In the absence of the Codex MRL, the MRLs set by the country of origin may apply subject to evaluation of competent authority. It is envisioned that compliance with these set limits will minimize regulatory disparities and enhance the trade as well as promote consumer protection against harmful effects of pesticides.

This document was drafted in accordance with the editorial rules of the BPS Directives, Part 3.

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1 Scope

This standard covers the maximum residue limits established for selected imported crops which includes apple, citrus fruits, grapes, longan, lychee, oranges, and pears.

2 Normative reference

The following referenced document is indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ASEAN Expert Working Group on Maximum Residue Limits of Pesticides. 2015. Database of ASEAN MRLs.

3 Terms and definitions

For the purposes of this standard, the following definitions shall apply:

3.1

active ingredient

the part of the product that provides the pesticidal action

3.2

import tolerance

maximum residue limit (MRL) that is set based on uses registered in foreign countries in order to allow the import of treated commodities from abroad and facilitate international trade

3.3

maximum residue limit (MRL)

maximum concentration of a pesticide residue (expressed as mg/Kg) by either Codex Alimentarius Commission or national authority to be legally permitted in or on food commodities and animal feeds. MRLs are based on GAP data and foods derived from commodities that comply with the respective MRLs are intended to be toxicologically acceptable

3.4

pesticide

any substance or product, or mixture thereof, including active ingredients, adjuvants and pesticide formulations, intended to control, prevent, destroy, repel or mitigate directly or indirectly, any pest. The term shall be understood to include insecticide, fungicide, bactericide, nematicide, herbicide, molluscicide, avicide, rodenticide, plant regulator, defoliant, desiccant and the like

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3.5

pesticide residue

any specified substance in food, agricultural commodities, or animal feeding resulting from the use of a pesticide. The term includes any derivatives of a pesticide, such as conversation products, metabolites, reaction products, and impurities considered to be of toxicological significance

3.6

residue definition

the spectrum of compounds to be analyzed which may include the parent compound, metabolites, isomers, reaction products and/or degradants

4 Maximum Residue Limits

4.1 apple

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| captan | 25.00 |
| carbaryl | 5.00 |
| chlorpyrifos | 1.00 |
| cyfluthrin | 0.50 |
| diflubenzuron | 1.00 |
| deltamethrin | 0.20 |
| fenitrothion | 0.50 |
| methidathion | 0.50 |

4.2 citrus fruits

| active ingredient | import tolerance (mg/Kg) |
|---|--------------------------|
| 2,4-D | 1.00 |
| amitraz | 0.50 |
| benomyl | 10.00 |
| bromopropylate | 2.00 |
| carbaryl | 7.00 |
| chlorothalonil | 5.00 |
| chlorpyrifos | 1.00 |
| cyfluthrin | 0.30 |
| cyhalothrin (includes λ-cyhalothrin) | 0.20 |
| cypermethrin | 2.00 |
| deltamethrin | 0.02 |
| dicofol | 5.00 |
| diflubenzuron | 0.50 |

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| dimethoate | 2.00 |
|--------------|------|
| fenthion | 2.00 |
| fenvalerate | 2.00 |
| imidacloprid | 1.00 |
| malathion | 4.00 |
| metalaxyl | 5.00 |
| methomyl | 1.00 |
| paraquat | 0.02 |
| permethrin | 0.50 |

4.3 grapes

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| bromopropylate | 2.00 |
| carbaryl | 5.00 |
| carbendazim | 3.00 |
| chlorothalonil | 0.50 |
| chlorpyrifos | 0.50 |
| cycloxydim | 0.50 |
| cypermethrin | 0.20 |
| deltamethrin | 0.05 |
| dicofol | 5.00 |
| dithiocarbamates | 5.00 |
| ethephon | 1.00 |
| fenitrothion | 0.50 |
| fenpropathrin | 5.00 |
| folpet | 2.00 |
| imidacloprid | 1.00 |
| iprodione | 10.00 |
| malathion | 8.00 |
| metalaxyl | 1.00 |
| methidathion | 1.00 |
| methomyl | 0.30 |
| permethrin | 2.00 |
| tebufenozide | 2.00 |
| triadimefon | 0.50 |
| triadimenol | 2.00 |
| vinclozolin | 5.00 |

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4.4 orange

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| benomyl | 1.00 |
| carbendazim | 1.00 |
| dithiocarbamates | 2.00 |
| methidathion | 2.00 |
| thiamethoxam | 0.50 |

4.5 longan

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| chlorpyrifos | 0.50 |
| cypermethrin | 1.00 |

4.6 lychee

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| chlorpyrifos | 2.00 |
| cypermethrin | 2.00 |

4.7 pear

| active ingredient | import tolerance (mg/Kg) |
|-------------------|--------------------------|
| captan | 15.00 |
| carbaryl | 5.00 |
| chlorpyrifos | 1.00 |
| diflubenzuron | 1.00 |
| dimethoate | 1.00 |
| fenitrothion | 0.50 |

5 Sampling and analysis

Analytical and sampling methods to be used for ascertaining conformance to the established limits shall be in accordance with relevant text by the Codex Alimentarius Commission and/or the competent authority for the commodity.

CACGL 33-1999 Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs

CACGL 40-1993 Guidelines on Good Laboratory Practice in Pesticide Residue Analysis

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CACGL 41-1993 Portion of Commodities to which Maximum Residues Limits Apply and which is Analyzed

CACGL 56-2005 Guidelines on the Use of Mass Spectrometry (MS) for Identification, Confirmation and Quantitative Determination of Residues

CACGL 84-2012 Principles and Guidance on the Selection of Representative Commodities for the Extrapolation of Maximum Residue Limits for Pesticides to Commodity Groups

CACGL 90-2017 Guidelines on Performance Criteria for Methods of Analysis for the Determination of Pesticide Residues in Food and Feed

International Atomic Energy Agency – Food Contaminant and Residue Information System Pesticide Residue Methods

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Bibliography

- Asia-Pacific Economic Cooperation. *Import MRL Guideline for Pesticides* [PDF File]. (2016). Retrieved from http://apec.org/-/media/APEC/Publications /2016/8/ Import-MRL-Guideline-for-Pesticides/16_scsc_fscf_ptin_wksp1_002_zAP EC-FSCF-MRL-Guideline_rev.pdf
- Bureau of Agriculture and Fisheries Standards. (2011). *PNS/BAFS 49 Code of Agricultural Practicies (GAP) for Fruits and Vegetable Farming* [PDF File]. Retrieved from http://bafs.da.gov.ph/2017-10-12-00-46-55/standardformulation/philippine-national-standards?start=40
- Department of Agriculture, Food & the Marine (DAFM) of Ireland. (2018). *Import Tolerances*. Retrieved from http://www.pcs.agriculture.gov.ie/foodsafety/the monitoringandcontrolsprogramme/importtolerances/
- Food and Agriculture Organization of the United Nations & World Health Organization. (2019). Codex Alimentarius International Food Standards. *Pesticide Residue Database*. Retrieved from http://www.fao.org/fao-whocodexalimentarius/cod ex-texts/maximum-residue-limits/en/
- Food and Agriculture Organization of the United Nations & World Health Organization. (2017). *Guidelines on performance criteria for methods of analysis for the determination of pesticide residues in food and feed* [PDF File]. Retrieved from http://www.fao.org/fao-who-codexalimentarius/shproxy/fr/?lnk=1&url= https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252F Standards%252FCAC%2BGL%2B90-2017%252FCXG_090e.pdf
- Food and Agriculture Organization of the United Nations & World Health Organization. (2014). International Code of Conduct on Pesticide Management [PDF File]. Retrieved from http://www.fao.org/fileadmin/templates/agphome/documents /Pests_Pesticides/Code/CODE_2014Sep_ENG.pdf
- Food and Agriculture Organization of the United Nations & World Health Organization. (March 2016). International Code of Conduct on Pesticide Management, Guidelines on Highly Hazardous Pesticides [PDF file]. Retrieved from http://www.fao.org/3/a-i5566e.pdf

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