

PHILIPPINE NATIONAL STANDARD

**PNS/BAFS 162:2020
ICS 65.100.01**

Maximum Residue Limits (MRLs) of Pesticide Residues in Milled Rice



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Foreword

The Philippine National Standard (PNS) for the Maximum Residue Limits (MRLs) of Pesticides in Rice (*PNS/BAFS 161:2015*) was reviewed and updated by the Bureau of Agriculture and Fisheries Standards (BAFS) to cater newly registered MRLs in the Philippines and take into consideration the MRLs set internationally for pesticide residues in rice. It has been prepared by the Technical Working Group (TWG) through Department of Agriculture (DA) Special Order No. 1092 series of 2018 and 332 series of 2019. This standard has been approved by the Secretary of the Department of Agriculture in 2020.

The development of the PNS considered the registered MRLs of pesticides in rice as submitted by the Fertilizer and Pesticide Authority. MRLs obtained from the databases of Codex Alimentarius Commission, ASEAN, and trading partners such as China, Japan, and United States were used in the harmonization process of the PNS with the international standards.

This Standard includes the following significant changes compared to its previous version:

- Revision of the terms and definitions
- Updated Maximum Residue Limits (MRLs) per active ingredient

This standard cancels and replaces PNS/BAFS 161:2015.

This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2.

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1 **1 Scope**

2

3 This standard covers the maximum residue limits established for milled rice (*Oryza*

4 *sativa* L.).

5

6

7 **2 Normative references**

8

9 There are no normative references for this standard.

10

11

12 **3 Terms and definitions**

13

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

15

16 **3.1**

17 **active ingredient**

18 part of the product that provides the pesticidal action

19

20 **3.2**

21 **maximum residue limit (MRL)**

22 maximum concentration of a pesticide residue (expressed as mg/kg) by either Codex

23 Alimentarius Commission or national competent authority to be legally permitted in or

24 on food commodities and animal feeds. MRLs are based on Good Agricultural

25 Practices (GAP) data and foods derived from commodities that comply with the

26 respective MRLs are intended to be toxicologically acceptable

27

28 **3.3**

29 **milled rice**

30 polished rice

31 kernels obtained after removal of hull and bran

32

33 **3.4**

34 **pesticide**

35 any substance or product, or mixture thereof, including active ingredients, adjuvants

36 and pesticide formulations, intended to control, prevent, destroy, repel or mitigate

37 directly or indirectly, any pest. The term shall be understood to include insecticide,

38 fungicide, bactericide, nematocide, herbicide, molluscicide, avicide, rodenticide, plant

39 regulator, defoliant, desiccant and the like

40

41 **3.5**

42 **pesticide residue**

43 any specified substance in food, agricultural commodities, or animal feed resulting

44 from the use of a pesticide. The term includes any derivatives of a pesticide, such as

45 conversion products, metabolites, reaction products, and impurities considered to be

46 of toxicological significance

47

48

49

50 **3.6**51 **residue definition**

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

54

55

56 **4 Maximum Residue Limits (MRLs)**

57

58 **Table 1 – MRL per active ingredient in milled rice**

59

Active ingredient	MRL (mg/kg)
2,4-D amine	0.10
2,4-D ester	0.10
2,4-D IBE	0.10
acephate	0.02
azoxystrobin	0.60
benomyl	1.00
bentazone	0.10
bifenthrin	0.70
bispyribac sodium	0.10
buprofezin	0.50
butachlor	0.10
carbaryl	1.00
carbofuran	0.20
carbosulfan	0.20
carfentrazone-ethyl	1.30
cartap hydrochloride	0.20
chlorantraniliprole	2.00
chlorothalonil	0.10
chlorpyrifos	0.50
chlothianidin	0.50
clomazone	0.10
cyfluthrin/beta-cyfluthrin	0.06
cyhalofop-butyl	0.05
cypermethrins (includes alpha- and zeta- cypermethrin)	2.00
deltamethrin	1.00
difenoconazole	0.40
dimethoate	0.10
dinotefuran	0.10
esfenvalerate	2.00
ethoxysulfuron	0.10

60

61
62

Table 1 (continued)

difenoconazole	0.40
dimethoate	0.10
dinotefuran	0.10
esfenvalerate	2.00
ethoxysulfuron	0.10
fenitrothion	0.20
fenoxaprop-p-ethyl	0.05
fipronil	0.01
flubendiamide	0.05
flucetosulfuron	0.10
fluoxastrobin	0.01
fosetyl aluminum	0.05
gamma-cyhalothrin	0.10
glyphosate	0.10
hexaconazole	0.02
imazosulfuron	0.10
imidacloprid	1.00
indoxacarb	0.50
iprodione	3.00
isoprocarb/MIPC	0.50
isoprothiolane	1.50
lambda-cyhalothrin	0.50
mancozeb	0.10
methomyl	0.10
niclosamide	0.01
oxadiazon	0.02
pendimethalin	0.20
phenthoate	0.05
picoxystrobin	0.50
pretilachlor	0.05
propiconazole	0.50
propineb	0.05
propyrisulfuron	0.50
pymetrozine	0.02
pyribenzoxim	0.05
sethoxydim	0.20
tebuconazole	1.50
tebufenozide	0.05
tefuryltrione	0.01
tetraconazole	0.50

Table 1 (continued)

thiamethoxam	0.50
thiophanate methyl	1.00
thiram	5.00
triafamone	0.01
trifloxystrobin	5.00
triflumezopyrim	0.01

5 Sampling and analysis

Analytical and sampling methods to be used for ascertaining conformance to the established limits should 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

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

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

CXG 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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