

### Ministry of Agriculture and Forestry Department of Agriculture

# **Guideline for Pesticide Labeling**

2018

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#### INTRODUCTION

To implement the Pestiide Management Decree No. 258/GOV, dated 24 August 2017 that defines the principles, regulations and measures regarding the use of pesticides, management and monitoring of pesticide activities to ensure the quality, efficiency and safety for humans, animals, plants and environment with the aim of allowing the agricultural and forest production to be carried out in line with clean, green and sustainable agriculture, capable to ensure regional and international integration, and contribute to the national socio- economic development.

According to article 26 of the Decree, the Department of Agriculture develop technical manual on pesticide labelling, which provide the important information based on technical documents of FAO to harmonize with ASEAN country and regional on pesticide labelling and facilitate for pesticide registration unit able to check the compliance of the documents including advise manufacturers and importer to meet the requirements of pesticide product labelling.

The instruction is firstly published and may be improved for the next publication in order to meet development of Lao PDR and suitable and fair for real implementation of concerned sectors.

> Director General, Department of Agriculture

### 2. THE DEFINITION ANF IMPORTANCE OF THE LABEL

Label means the written, printed or graphic matter on, or attached to, the pesticide or the immediate container thereof and also to the outside container or wrapper of the retail package of the pesticide.

Label is important part of consignments. Additional information maybe provided with the hazards and /or leaflet bind with container, in this case the content should be the same as in the label.

### 2. LABEL CONTENTS

The

main 1	requirements should include:
	Information to identify the product
	hazard and safety information
	instruction of use
П	other relevant information

### 2.1. Information to identify the product

- 1) Product trade name
- 2) Product category (e.g. herbicide, insecticide, fungicide, etc.)
- Type of formulation (name and code according to the International Formulation Coding System, please refer to Annex 1 for the list)
- 4) Active ingredient name (ISO common name should be used, or in the absence use IUPAC or name as approved by the authority)
- 5) Active ingredient content (this should normally be expressed as "contains *X* g a.i. per kg" (for solids, viscous liquids, aerosols or volatile liquids) or "contains *X* g a.i. per liter" (for other liquids). The content may also be expressed as percentage weight/weight (%W/W). For microbial pesticides the content normally be expressed as
  - For microbial pesticides the content normally be expressed as cfu/ml or cfu/g)
- 6) Name of any dangerous co-formulants (e.g. solvents, etc.)
- 7) Net contents (this should be expressed in metric units (e.g. liter, gram, kilogram, which can be abbreviated to l, g and kg) unless the country does not use, or only partly uses, metric units. In such situations, local units should take precedence, but metric units should also be given)
- 8) Batch number
- 9) Registration or approval number assigned by the Pesticides Registration Authority

### 2.2. Hazard and safety information

### 1) Hazard symbol(s)

All health, environmental and physical hazard symbols appropriate for the hazard category should be printed on the colour band of the label and the hazard symbols must be placed close to the signal word and hazard statements.

### 2) Signal word

Depending on the hazard category, the signal word "Danger" or "Warning" should appear on the colour band of the label close to hazard symbols.

### 3) Hazard statement(s)

Depending on the hazard category, appropriate hazard statements should appear on the colour band of the label close to the hazard symbols and signal word. All assigned hazard statements should appear on the label.

#### 4) Colour band

Depending on the hazard category, all label must display the hazard colour band assigned to the pesticide and the colour band must be at least 10 percent of the label height that runs from the left to the right of the lowest part of the label. Only hazard symbols, signal word, hazard statements and safety pictograms may be printed on the colour band.

Colour codes banding precautions photos relating to toxicity of product in the following manner of declining toxicity at the bottom band of label as classification under WHO:

- PMS Red 199C for extremely toxicity pesticide products;
- PMS yellow C for moderate toxicity pesticide products classified;
- PMS Blue 293C for toxicity pesticide products;
- PMS Green 347C for unlikely toxicity products.

### 5) Safety statements

If appropriate, the following general category of safety statements should be stated at the most appropriate place of the label to warn the user of the potential hazard of the pesticide:

General precautionary statements or warnings
Product specific precautionary statements or warning

	Relevant protective clothing
	Precaution when handling the concentrate
	Precaution before, during and after application
	Environmental and non-target organisms precautions
	A warning against the reuse of containers and instructions for
	the safe disposal or
	decontamination of the product and used containers.
6)	Safety /Advice pictograms Please refer to Annex 2 - FAO/Croplife Pictograms on a pesticide label
7)	First aid and medical advice Labels should carry first aid and medical advice
2.3	Use instruction
	How to mix and apply the product, and rate of use;
	When to use the product (including timing and frequency
	of application) or when not to use the product (e.g. during
	the flowering period of the crop);
	Where to use the product: crops, targets pests, areas;
	Any limitations, such as susceptible crops or varieties,
	weather conditions, application equipments, etc.;
	Withholding periods and pre-harvest intervals;
	Compatibility with other products, where appropriate;
П	Resistance prevention and management information.

### 2.4. Other relevant information

- 1) Product or user category
- 2) Good agricultural practice statements (Some example of standardized GAP statements are given in Annex 3).
- 3) Date of manufacture/formulation (Actual date of manufacture).
- 4) Expiry date or similar statement such as the shelf-life (month/year).

### 3. LABEL OF PESTICIDE

### 3.1 Language label

All pesticide product that produce, import and distribution in Lao PDR should be in containers with label that have trade mark and statement in Lao language. In case could not affixe Lao

labels on the pesticide container should have leaflet or brochure attached with products, exclude extremely hazardous pesticides.

Label translated should be accepted by Department of Agriculture prior using.

### 3.2 Designing a label

Designing label and layout statements may have one, two, three or more panels. Examples of how to structure the different labels are given as follows, please see in Annex 4,5 and 6.

### 3.3 Print size and style

It is recommended that all safety text should be at least 8-point, and that all other text should be at least 6-point. Highlighting with bold letters is more effective than using capitals. The followings should be avoided:

- Italics, except for Latin names
- Vertical or diagonal text
- Overprinting illustrations

#### 3.4 Use of colour

Red is a generally accepted warning colour and should be used only to highlight warning phrases, or for hazard symbols and safety and precaution statements. For best contrast and easy reading, the text on labels should be mainly black on a plain white background. The following colour combinations may also be considered:

- Black on yellow
- Green on white
- White on blue

### 5. USE OF SIGNALS, STATEMENTS AND COLOUR BAND FOR HAZARD OF PESTICIDES

To be able to communicate a hazard or risk effectively, the pesticide needs to be classified according to its hazards and/or risks. The hazard classifications proposed here are based on the GHS and in these guidelines, only those classification are presented as far as they are relevant for pesticide labeling as follows: Hazard symbol, Signal word, Hazard statement. Please see in Annex 7.

### INTERNATIONAL FORMULATION CODING SYSTEM

The following is the list of formulation types and their international codes as introduced by CropLife

(GIFAP) and now adopted by FAO. These two letter codes should be used on labels.

Code Formulation type	Code Formulation type	
<b>AE</b> Aerosol generator	LS Solution for seed treatment	
AL Other liquids to be applied	MC Mosquito coil	
undiluted	ME Micro-emulsion	
<b>AP</b> Other powder to be applied	<b>OD</b> Oil dispersion	
undiluted	<b>OF</b> Oil miscible flowable concentrate	
<b>BR</b> Briquette	(oil miscible suspension)	
CB Bait concentrate	OL Oil miscible liquid	
CP Contact powder	<b>OP</b> Oil dispersible powder	
CS Capsule suspension	PA Paste	
<b>DC</b> Dispersible concentrate	PR Plant rodlet	
<b>DP</b> Dustable powder	<b>PS</b> Seed coated with a pesticide	
<b>DS</b> Powder for dry seed treatment	<b>RB</b> Ready-to-use-bait	
<b>DT</b> Tablet for direct application	SC Suspension concentrate	
EC Emulsifiable concentrate	SD Suspension concentrate for direct	
EG Emulsifiable granule	application	
<b>EO</b> Emulsion, water in oil	SE Suspo-emulsion	
<b>EP</b> Emusifiable powder	SG Water soluble granules	
<b>ES</b> Emulsion, for seed treatment	SL Soluble concentrate	
EW Emulsion, oil in water	SO Spreading oil	
<b>FS</b> Flowable concentrate for seed	<b>SP</b> Water soluble powder	
treatment	SU Ultra-low volume (ULV)	
FU Smoke generator	suspension	
GA Gas	TB Tablet	
GE Gas generating product	TC Technical material	
GL Emulsifiable gel	<b>TK</b> Technical concentrate	
GR Granule	UL Ultra-low volume (ULV) liquid	
GS Grease	<b>VP</b> Vapour releasing product	
GW Water soluble gel 22	WG Water dispersible granules	
<b>HN</b> Hot fogging concentrate	WP Wettable powder	

KK Combi-pack solid/liquid	WS Water dispersible powder
KL Combi-pack liquid/liquid	WT Water dispersible tablet
KN Cold fogging concentrate	XX Others WP
LN Long-lasting insecticidal net	

### FAO/CROPLIFE (GIFAP) PICTOGRAMS ON A PESTICIDE LABEL

Type		Pictogram and messa	ge
Storage pictograms		Keep locked away and out of reach of children	
	Wear gloves	Wear face shield	Wear boots
Advice pictograms	Wear protection over nose and mouth	Wear respirator	
	Wear overalls	Wear apron	Wash after use
Warning pictograms		Ŷ	
	Dangerous/harmf		

### EXAMPLES OF FAO RECOMMENDED GAP STATEMENTS

#### ANIMALS AND THE ENVIRONMENT

- 1. "Dangerous/harmful to domestic animals and wildlife".
- 2. "Keep stock out of treated areas until all the weeds are dead".
- 3. "Do not contaminate lakes, rivers, ponds or streams with waste chemical or used container".

#### FOOD AND ANIMAL FEEDSTUFFS

- 1. "DO NOT apply to food or feed crops".
- 2. "DO NOT apply to surfaces coming into contact with food".
- 3. "Keep away from food, drink and animal feeding stuffs".

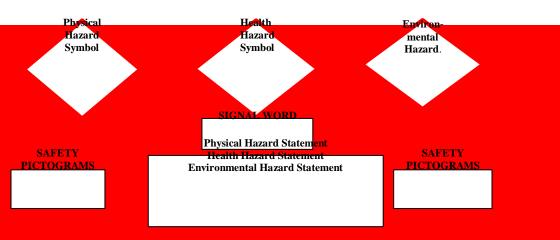
#### TREATED SEED

- 1. "This seed has been chemically treated do not handle unnecessarily".
- 2. "DO NOT re-use sacks for food or animal feed".
- 3. "DO NOT use treated seed for food or animal feed".

### EXAMPLE OF LAYOUT OF ELEMENTS IN ONE PANEL LABEL

- 1. Product trade name
- 2. Product category
- 3. Type of formulation
- 4. Active ingredient(s) name
- 5. Active ingredient(s) contents
- 6. Registration number
- 7. Name, address and telephone number of registrant
- 8. Batch number
- 9. Net contents
- 10. Manufacturing/formulation date
- 11. Expiry date (optional)
- 12. General safety statements
- 13. Directions for use in table form
- 14. Withholding period (pre-harvest interval or pre-slaughtering interval)
- 15. Re-entry periods

- 16. Safety statements (Precautionary statements and warning phrases)
- 17. Good Agricultural Practice (GAP) statements
- 18. First aid instructions
- 19. Symptom of poisoning
- 20. Medical treatment/advice



### EXAMPLE OF LAYOUT OF ELEMENTS IN TWO PANEL LABEL

### Main panel

### (Information on product identification)

- 1. Product trade name
- 2. Product category
- 3. Type of formulation
- 4. Active ingredient(s) name
- 5. Active ingredient(s) contents
- 6. Registration number
- 7. Name, address and telephone number of registrant
- 8. Batch number
- 9. Net contents
- 10. Manufacturing/Formulation date
- 11. Expiry date (Optional)
- 12. General Safety Statements

### Ancillary panel (Safety information and use instructions)

- 13. Directions for use in table form
- 14. Withholding period (preharvest interval or preslaughtering interval)
- 15. Re-entry periods
- 16. Safety statements
  (Precautionary
  statements and warning
  phrases)
- 17. Good Agricultural Practice (GAP) statements
- 18. First aid instructions
- 19. Symptoms of poisoning
- 20. Medical treatment/advice to doctors



# Annex 6 EXAMPLE OF LAYOUT OF ELEMENTS IN THREE PANEL LABEL

# Ancillary panel (Safety information) 16. Safety statements (Precautionary

- statements and warning phrases) 17. Good Agricultural Practice (GAP)
- 18. First aid instructions

statements

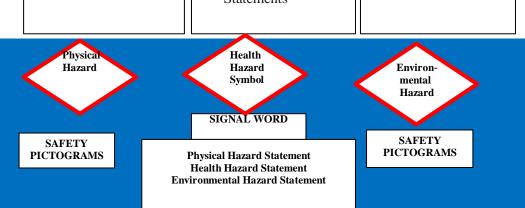
- 19. Symptoms of poisoning
- 20. Medical treatment/

## Main panel (Information on product identification)

- 1. Product trade name
- 2. Product category
- 3. Type of formulation
- 4. Active ingredient(s) name
- 5. Active ingredients content
- 6. Registration number
- Name, address and telephone number of registrant
- 8. Batch number
- 9. Net contents
- 10. Manufacturing/ Formulation date
- 11. Expiry date (Optional)
- 12. General Safety
  Statements

### Ancillary panel (Use instructions)

- 13. Directions for use in table form
- 14. Withholding period (pre-harvest interval or pre slaughtering interval)
- 15. Re-entry periods



 $\label{eq:Annex7} Annex\, 7$  Use of signal word, statement and color band for hazard of pesticides

Hazard	Label elements		
category	Symbol and signal word	Hazard statement	Colour band
Ia	Danger	Fatal if swallowed  or  Fatal in contact with skin  or  Fatal if inhaled	Red
Ib	Danger	Fatal if swallowed  or  Fatal in contact with skin  or  Fatal if inhaled	Red
П	Danger	Toxic if swallowed  or  Toxic in contact with skin  or  Toxic if inhaled	Yellow
III	Warning	Harmful if swallowed or Harmful in contact with skin or Harmful if inhaled	Blue
IV	( No symbol)	Maybe harmful if swallowed or Maybe harmful in contact	Green

with skin or Maybe harmful if inhaled	

### Refferences

- Decree on Pesticides Management in Lao PDR, No. 258/GOV, dated 24/08/2017.
- The new FAO/WHO Guidelines for Good Labeling Practice for Pesticides.
- Guidance for Harmonizing Pesticide Regulatory Management in Southeast Asia, RAP Publication 2012/13.