

ASEAN

Common Requirements of Pre-packaged Products

INTRODUCTION

ASEAN Cooperation on Legal Metrology is aimed at facilitating the removal of technical barriers to trade associated to legal metrology in order to contribute to the realization of the ASEAN Free Trade Area (AFTA).

Over the past years, the ASEAN Legal Metrology Authorities have been working together through the Working Group on Legal Metrology of the ASEAN Consultative Committee on Standards and Quality (ACCSQ), among others, to align legal metrology requirements amongst ASEAN member countries and strengthen ASEAN cooperation at relevant International Fora.

As a result of this collaboration, the ASEAN Common Requirements for Pre- Packaged Goods was finalized during the 2nd Workshop on Harmonization of Requirements for Pre-Packaged Goods on 16-18 February 2004 in Bangkok, Thailand and subsequently endorsed by ACCSQ during its 24th Meeting on 3-4 August 2004 in Kuala Lumpur, Malaysia.

The full implementation of these Requirements by Member Countries by **2008** will assist Legal Metrology Authorities in ASEAN in ensuring better consumers protection and at the same time assist the industry in ASEAN in reducing the cost of doing business and gaining market access for its products in regional and international markets.

Section 1 Terminology

- 1.1 **Pre-packaged Product** – means any commodity that is enclosed in a container or wrapped in any manner, and for which its quantity has been determined and indicated on its label prior to being offer for sale. The quantity of the product contained cannot be changed without the pre-package being opened or doing a perceptible modification.
- 1.2 **Nominal* Quantity (Q_n)**. - The amount of the identified product in a pre-package exclusive of the package and any other material packed with the product
- * The “nominal” net quantity is declared on the label by the packer while the “actual” net quantity of product in the pre-package determined by measurement.*
- 1.3 **Inspection lot** - A definite quantity of some pre-packages produced at one time under conditions that are presumed uniform and from which a sample is drawn and inspected to determine conformance with specified criteria for acceptance or rejection of the inspection lot as a whole.
- 1.4 **Random Sampling** – The sample pre-packages are chosen randomly (i.e. they have all the same probability to be chosen in the sample)
- 1.5 **Sample (n)**. – Pre-packages taken from an inspection lot and used to provide information that will serve as the basis for a decision on the conformance of the inspection lot.
- 1.6 **Tolerable Deficiency (T)**. – The deficiency in quantity of product permitted in a pre-package.
- 1.7 **Non-conforming Pre-package** – A pre-package that has a negative error greater than the tolerable deficiency (T).

Section 2 Requirements

Pre-packages covered by this ASEAN Common Requirements shall meet the following:

- 2.1 The actual contents shall not be less, on average, than the nominal quantity,
- 2.2 For weight and volume declaration
- 2.2.1 The number of pre-packages having a negative error greater than the tolerable deficiency laid down in Table 1 shall be that allowed in Annex II:
- 2.2.2 No pre-package shall have a negative error greater than twice the tolerable deficiency given in Table 1.

Table 1: Tolerable Deficiency

Nominal quantity (Q_n) in g or ml		Tolerable Deficiency (T)	
from	to	as % of Q_n	g or ml
5	50	9.0	—
50	100	—	4.5
100	200	4.5	—
200	300	—	9.0
300	500	3.0	—
500	1,000	—	15.0
1,000	10,000	1.5	
10,000	15,000		150
15,000	50,000	1	

Note: When using the table, the values of the tolerable deficiency shown as percentages in the table, calculated in units of weight or volume, shall be rounded **up** to the nearest one-tenth of a gram or milliliter.

- 2.3 For drained weight products, no pre-package shall have a negative error greater than **two** times of the tolerable deficiency specified in Table 1.
- 2.4 For length declaration, the tolerable deficiency shall be 2 % of the nominal quantity of product
- 2.5 For area declaration, the tolerable deficiency shall be 3 % of the nominal Quantity of product
- 2.6 Piece declaration
 - 2.6.1 Up to 50 pieces the content shall not be less than the nominal quantity
 - 2.6.2 For more than 50 pieces the actual contents shall not be less, on average, than the nominal quantity and, the negative error is one piece for each beginning hundred.

Note Base temperature - 20 degrees or better: depending on the product.

In all operations for checking quantities of products expressed in units of volume, the value employed for the actual contents shall be measured at or corrected to a temperature of 20°C, whatever the temperature at which packaging or checking is carried out. However, this rule shall not apply to petroleum, chilled, deep frozen or frozen products, the quantity of which is expressed in units of volume.

Section 3 Labelling

3.1 The label of any pre-packaged products will contain the following information:

- Identity of the product.
- Name and address of manufacturer, packer, importer or distributor,
- Net Contents in SI units or pieces.

3.2 Pre-packages containing liquid products shall be marked with their nominal volume and pre-packaged containing other products shall be marked with their nominal weight except in the case of trade practice or national regulations which provide otherwise and which are identical in all ASEAN member countries, or in the case of contrary country rules.

3.3 Size of the letters and numbers of the net contents

Table 2: Minimum size of letters and numbers

Nominal Quantity in g or ml	Minimum height of numbers and letters in mm
up to 50	2
more than 50 to 200	3
more than 200 to 1000	4
more than 1000	6

For the nominal quantity in piece, length and area units, the minimum height of numbers and letters is 2 mm.

Section 4 Drained weight

Drained weight is a special case for weight indication. For some pre-packages which contain liquid medium, it is prescribed to declare beside the total weight also the drained weight.

The drained weight indication has to be in the same field of vision like the total weight. See also Annex III

Section 5 Pre-packages less than 5 g or 5 ml

For pre-packages with a nominal quantity less than 5 g or ml there is no demand for declaration. But if it is declared, **only** the average value must be equal or more than the nominal quantity.

Annex I

1. Guideline for Supervision

- 1.1 The manufacturer should be supervised at least once a year.
- 1.2 The manufacturer should keep records on the net content checking of his products and should be able to provide the records to the inspectors when requested.
- 1.3 The manufacturer should provide proper assistance to the inspectors.
- 1.4 Legal metrology officials must obtain the right to enter the plants for inspection during normal working hours.

2. Suitable scales for supervision

Accuracy for weight measurement

Gross Weight in g	Scale interval (d) in g
less than 25	0.01
from 25 to less than 1000	0.1
from 1000 to less than 5000	1.0
5000 and more	2.0

3. Suitable control scales for packers

Nominal quantity in g or ml	Scale interval (d) in g
less than 10	0.1
from 10 to less than 50	0.2
from 50 to less than 150	0.5
from 150 to less than 500	1.0
from 500 to less than 2500	2.0
2500 and more	5.0

Annex II

1. Sampling Plans for use by Legal Metrology Officials

- 1.1 Inspection lots shall be assumed to be homogeneous if there is no indication to the contrary.
- 1.2 Pre-packages for the sample shall be selected using random sampling.
- 1.3 Sample pre-packages must be collected after the point of final checking by the packer.

2. Sampling plan for pre-packages with nominal quantity expressed in units of weight and volume:

A) Normal simple sampling plan:

Lot size L	Sample size n	Number of non-conforming pre-packages allowed c	k-factor k
100 to 500	50	3	0.379
501 to 3200	80	5	0.295
more than 3200	125	7	0.234

$$\bar{X}_0 = \bar{X}_i + ks \quad (s \text{ is the standard deviation of } X_i)$$

\bar{X}_0 means the corrected mean

\bar{X}_i means the average value of X_i

X_i means observed values

B) Total test:

For the lot size smaller than 100 (from 10-99) there is a 100% inspection and the number of non-conforming pre-packages shall not exceed 2.5 percent of the produced pre-packages.

C) Destructive test:

Lot size L	Sample size n	Number of non-conforming pre-packages allowed c	k-factor k
equal or more than 100	20	1	0.640

Remark: The sample size (n) for carrying out the destructive tests for a lot size of 100 or more prepackages are 20 prepackages: It is up to decision of each member countries to imply this scheme.

2. Sampling plan for pre-packages with nominal quantity expressed in units of Length, area and count:

Lot size L	Sample size n	Number of non-conforming pre-packages allowed c	Factor for confidence a
26 to 50	3	0	1.00
51 to 150	5	0	0.35
151 to 500	8	1	0.20
501 to 3200	13	1	0.15
3201 and more	20	1	0.10

$$\bar{X}_0 = \bar{X}_i + aR \quad (R \text{ is the span of } X_i)$$

\bar{X}_0 means the corrected mean

\bar{X}_i means the average value of X_i

X_i means observed values

4. Guideline for Tolerable Deficiency for unequal pre-packages

For the first step in trade unequal pre-packages with weight indication are not allowed to have a greater error than below:

nominal quantity (Q_n) in g	Tolerable Deficiency in g
Up to 500	2.0
501 to 2000	5.0
2001 to 10000	10.0

Annex III: Drained Quantity of Products Packed in Liquid Medium (Informative)

- III.1 This procedure can be used to determine the drained quantity of product in a liquid medium and can be applied to pre-packages with nominal quantities up to 50 kg. When a pre-package contains solid goods in a liquid medium there are three possibilities:
- III.1.1 The liquid medium is meant to be left over after use (e.g. cucumber in vinegar water). The terms “content of the pre-package” (equal “quantity of the product”) applies to the solid products. In this case the solid products are those contained in the pre-package excluding the packing material and the liquid medium. The definition of packing material differs between product (solids) and packing material (= liquid medium + packing material).
- III.1.2 The liquid medium is not meant to be left over after use (e.g. liquid with raisins, but also to fruit juice with pulp.) The terms “content of the pre-package” (equal “quantity of the product”) applies to the solid products and the liquid medium. The definition of packing material differs between product (solids and liquid medium) and packing material. This Annex is not applicable on these products.
- III.1.3 The liquid medium might or might not be left over after use (e.g. sweetened juice with fruits and fish in oil.) The definition of packing material does not distinguish between the liquid medium and the goods. For instance a recipe on the label could clarify if the liquid medium “is meant to be left over after use” or not. In this case the quantity of solids and the quantity of liquid medium could be on the label^(see Note)

Note: The Codex Alimentarius Commission (CAC) of the Food and Agriculture Organization (FAO) of the United Nations requires in 4.3.3 “Net contents and drained weight” the “a food packed in a liquid medium shall carry a declaration....of the drained weight of the food.” See the CODEX “General Standard for the Labelling of Pre-packaged Foods” (CODEX STAN 1-1985)