MERCOSUR / GMC / RES. N ° 17/10

MERCOSUR TECHNICAL REGULATION ON METROLOGICAL CONTROL OF PRE-MEASURED PRODUCTS MARKETED IN UNITS OF LENGTH AND NUMBER OF UNITS OF EQUAL NOMINAL CONTENT (REPEAL OF RES. GMC N ° 27/97 and 10/03)

SEEN: The Treaty of Asuncion, the Ouro Preto Protocol and Resolutions N or 27/97, 38/98, 56/02, 10/03 and 07/08 of the Common Market Group.

CONSIDERING:

That it is necessary to have a harmonized Regulation to unify the laws national regulations on sampling and tolerance for metrological control of products premeasures marketed in units of length and number of units.

That such a metrological control system is intended to facilitate commercial exchange between the signatory countries of the Treaty of Asunción and to eliminate technical barriers that are obstacles to the free movement of pre-measured products, as well as guaranteeing consumer defense.

That Resolutions GMC N or 27/97 and 10/03 deal with the same subject and is considered necessary to unify their content and align them with GMC Resolution No. 08/07.

THE COMMON MARKET GROUP RESOLVES:

Art. 1 - Approve the "MERCOSUR Technical Regulation on Metrological Control of Premeasured Products Marketed in Units of Length and Number of Units of Equal Nominal Content ", which appears as an Annex and forms part of this Resolution.

Art. 2 - The competent national bodies for the implementation of the present Resolution are:

Argentina: Ministry of Economy and Public Finance
Secretary of Internal Trade

Brazil: National Institute of Metrology, Normalização e Qualidade Industrial

Paraguay: National Institute of Technology, Standardization and Metrology

Uruguay: Ministry of Industry, Energy and Mining.

Art. 3 - This Resolution shall be applied in the territory of the States Parties, at the trade between them and extra-zone imports.

Art . 4 - Repeal GMC Resolutions N or 27/97 and 10/03.

Art. 5 - This Resolution must be incorporated into the legal system of the States.
Parties before 12/15/2010.

LXXX GMC - Buenos Aires, 15 / VI / 10.

ANNEXED

MERCOSUR TECHNICAL REGULATION ON METROLOGICAL CONTROL OF PRE-MEASURED PRODUCTS MARKETED IN UNITS OF LENGTH AND NUMBER OF UNITS OF EQUAL NOMINAL CONTENT

1. APPLICATION

This Regulation will be applied for the verification of the net contents of the pre-measured products in factories, warehouses and points of sale, with nominal content equal, expressed in length in units of the INTERNATIONAL SYSTEM OF UNITS or number of units.

2. DEFINITIONS

2.1. PRE-MEASURED PRODUCT

It is all product packaged and measured without the presence of the consumer and in conditions of be marketed.

2.2. PRE-MEASURED PRODUCT OF EQUAL NOMINAL CONTENT

It is any product packaged and measured without the presence of the consumer, with the same content nominal and predetermined on the packaging during the manufacturing process.

2.3. EFFECTIVE CONTENT

It is the amount of product that the pre-measured product actually contains.

2.4. NOMINAL CONTENT (Qn)

It is the net content of the product declared on the container.

2.5. ERROR LESS, RELATED TO NOMINAL CONTENT

It is the difference in minus between the effective and the nominal content.

2.6. INDIVIDUAL TOLERANCE (T)

It is the difference tolerated in minus, between the effective content and the nominal content, that It is established in Tables II and III of these Regulations.

2.7. UNCERTAINTY OF MEASUREMENT OF NET OR EFFECTIVE CONTENT

The expanded uncertainty, with a confidence level of 95%, associated with instruments measurement and the test methods used to determine the quantities should not exceed 0.2T. (Table I).

2.8. LOT

2.8.1. IN FACTORY

It is the set of products of the same type (brand, nominal content), processed by the same manufacturer or divided into a certain period of time, under conditions essentially the same. It is considered a certain period of time, the production of one hour, provided product quantities are equal to or greater than 150 units.

In the event that the quantity exceeds 10,000 units, the surplus may form new batch (s).

2.8.2. ON DEPOSIT

In the warehouse, the batch refers to all units of the same type of product (brand, nominal content) as long as its number is greater than 150. In the If it exceeds 10,000 units, the surplus may form a new batch (s).

2.8.3. POINT OF SALE

At the point of sale, the lot refers to all units of the same type of product (brand, nominal content), provided that its number is equal to or higher than 9. In the event that it exceeds 10,000 units, the surplus may form new batch (s).

2.9. LOT SAMPLE

It is the quantity of pre-measured products randomly withdrawn from the batch and that will be effectively controlled.

2.10. ARITHMETIC MEAN OF THE SAMPLE $()\ x$

It is equal to the sum of the individual contents of each unit of the divided sample by the number of units in the sample. It is represented by the following equation:

$$\bar{x} = \frac{\sum_{i=1}^{neither} x_i}{n}$$

where:
x_i is the effective content of each unit of the product sample
n is the number of units in the product sample

2.11. STANDARD DEVIATION OF THE SAMPLE (S)

It is equal to the square root of the sum of the squares of the differences between the

individual contents and the average value of the contents, divided by the number of sample units, minus one.

$$S = \sqrt{\frac{\sum_{i=1}^{neither} (x_i - \bar{x})^{wo}}{n - 1}}$$

where:
x_i is the effective content of each unit of the product sample
n is the number of units in the product sample

3. PRE-MEASURED PRODUCT BATCH APPROVAL CRITERIA

3.1. PRODUCTS MARKETED IN UNITS OF LENGTH

The batch subjected to verification is approved when conditions 3.1.1 and 3.1.2 are simultaneously attended.

3.1.1. CRITERION FOR AVERAGE

$$\bar{x} \geq Qn - kS$$

where:
Qn is the nominal content of the product
k is the factor that depends on the size of the sample obtained from Table I
S is the standard deviation of the sample.

3.1.2. INDIVIDUAL CRITERIA

A maximum of **c** units of the sample is admitted below: Qn - T (**T** is obtained from the Table II and **c** is obtained from Table I).

For products that for technical reasons cannot meet the tolerances established in these Technical Regulations, the States Parties shall agree on the exceptions corresponding.

3.2. PRODUCTS MARKETED IN NUMBER OF UNITS

The batch subjected to verification is approved when conditions 3.2.1 and 3.2.2 are simultaneously attended.

3.2.1. CRITERION FOR AVERAGE

$$\bar{x} \geq Qn$$

where:
Qn is the nominal content of the product

3.2.2. INDIVIDUAL CRITERIA

A maximum of **c** units of the sample is admitted below: Qn - T (**T** is obtained from the Table III and **c** is obtained from Table I).

For products that for technical reasons cannot meet the tolerances established in these Technical Regulations, the States Parties shall agree on the exceptions corresponding.

TABLE I
Sampling for Control

Size of Lot	Size of the sample	Criterion for Acceptance of the Half	Criteria for Acceptance individual (c) (maximum of defective below Qn-T)
		$\bar{x} \geq Qn - kS$	
9 to 25	5	$\bar{x} \geq Qn - 059.2 \cdot S$	0
26 to 50	13	$\bar{x} \geq Qn - 847.0 \cdot S$	1
51 to 149	twenty	$\bar{x} \geq Qn - 640.0 \cdot S$	1
150 to 4000	32	$\bar{x} \geq Qn - 485.0 \cdot S$	two
4001 to 10000	80	$\bar{x} \geq Qn - 295.0 \cdot S$	5

TABLE II
Individual tolerance for products marketed in units of length

Individual tolerance T
2% of Qn

TABLE III
Individual tolerance for products marketed in number of units

Nominal content (Qn)	Individual tolerance (T)
Up to 30 units	0
From 31 to 100 units	1
From 101 to 200 units	two
From 201 to 300 units	3
More than 300 units	1 %*

* is rounded to the next whole number because it is a number of units that do not can be fractioned