# **INTERSTATE STANDARD (CIS-Country)**

TEXT OF THE STANDARD AS APPROVED AT THE INTERSTATE COUNCIL MEETING IN LVOV, UKRAINE ON OCTOBER 16-18, 2000 BY CIS MEMBER STATES.<sup>1</sup>

#### **CIGARETTES**

General Specifications

# 1. Scope of application

The present standard applies to cigarettes made of the blend of tobacco raw materials that underwent fermentation or other appropriate processing.

The compulsory requirements for quality of cigarettes directed at life and health safety of the consumer are set forth in Sections 4.1, 6.5, labeling requirements – in 4.11, 4.14, 4.17.

Obligation of other requirements for quality of cigarettes is determined by the legislation of the country, in which cigarettes are being sold to the consumers.

### 2. Normative references

The present standard contains references to the following standards:

GOST 166-89 Calipers. Specifications

GOST 5709-86 Paper for cigarettes. Specifications

GOST 7625-86 Label paper. Specifications

GOST 7730-89 Cellulose film. Specifications

GOST 7933-89 Cardboard for consumer packages. Specifications

GOST 8072-77 Fermented tobacco raw materials. Specifications

GOST 8273-75 Wrapping paper. Specifications

GOST 10131-93 Boxes made of wood and wooden materials for products of the food industries, agriculture and matches. Specifications

<sup>&</sup>lt;sup>1</sup> On the basis of the agreed international technical standard among the CIS member-states, the governmental agency Armstandard adopted on 11/04/2001 a document, according to which these standards were put into effect since 1/5/2001. Up to 1/1/2003 the transition to the standards has to end.

GOST 13511-91 Boxes of corrugated cardboard for food products, matches, tobacco and detergents. Specifications

GOST 14192-96 Cargo labeling.

GOST 18510-87 Writing paper. Specifications

GOST 24104-88 General purpose and standard laboratory scales and weighing devices. General specifications.

GOST 28498-90 Liquid-in-glass thermometers. General specifications. Testing methods.

GOST 30039-98 (ISO 8243-91) Cigarettes. Sampling

GOST 30 570-98 (ISO 10315-91) Cigarettes. Determination of the nicotine content in the smoke condensate. Gas chromatography method.

GOST 30571-98 (ISO 4387-91) Cigarettes. Determination of the content of humid condensate and dry condensate without nicotine (tar) in the cigarette smoke with the aid of laboratory smoking machine.

## 3. Definitions

3.1 The present standard includes the following terms with respective definitions:

pack: a unit of consumer package made of cardboard, of packet or label paper and containing a certain number of cigarettes;

souvenir box: a unit of consumer package made of box cardboard or other materials, colorfully designed and containing several packs of cigarettes or cigarettes without packs;

box carton: a unit of group consumer package made of box cardboard or label paper and containing definite number of packs of cigarettes;

block bundle: a unit of group consumer package for cigarettes wrapped up in paper, polymer film or tied up with a paper tape;

batch of cigarettes: the quantity of cigarettes of the same brand, size, type of package, which is intended for control purposes;

brand of cigarettes: specific name of cigarettes, with specific consumer qualities, determined in normative and technical documentation;

label for tobacco products: artistically designed pattern made of cardboard, packet or label paper or other materials, used for making boxes, packs and cartons.

# 4. General technical requirements

- 4.1 The cigarettes must comply with the requirements of this standard and hygienic standards for tar and nicotine content in the smoke as per the normative documents of the country where the cigarettes are sold.
- 4.2 Cigarettes are being produced in different brands. Each brand of cigarettes must differ from other ones in the name and in one or several features: formula, dimensions, presence or absence of filter, as well as other features established by the producer or licensor..
- 4.3 For production of cigarettes the following materials are used:

tobacco raw materials fermented according to GOST 8072;

tobacco strips according to the normative or technical document;

tobacco recovered according to the normative or technical document;

tobacco stems according to the normative or technical document;

paper for cigarettes according to GOST 5709;

acetate filters according to the normative or technical document;

paper filters according to the normative or technical document;

combined filters according to the normative or technical document;

Raw and other materials, including imported materials permitted for use in accordance with the normative documents or permitted for use by the established procedure in the country where the cigarettes are sold.

- 4.4 The cigarettes may be oval or round, with or without a filtering mouthpiece.
- 4.5 Physical characteristics of the cigarettes are established within the following range:

length of cigarettes - from 45 to 160 mm and the maximum deviation from the standard length is  $\pm$  1.0 mm;

length of the filtering mouthpiece - from 12 to 45 mm and the maximum deviation from the standard length is  $\pm$  0.5 mm;

humidity of tobacco in cigarettes  $-13 \pm 2\%$ 

mass proportion of dust - not more than 3.5 3.5%.

4.6 As for their appearance cigarettes must be intact and clean. The filtering mouthpiece must be firmly glued. Possible defects of cigarettes and packs appearance is established by the producer.

A recommended estimation procedure of the appearance of cigarettes and consumer packaging is given in Appendix A.

- 4.7 The features of aroma and taste of smoke of every brand are established by the producer or licensor and is monitored by tasting. Scents and flavors not characteristic to specific cigarette brands are inadmissible
- 4.8 The cigarettes are packed into packs or souvenir boxes, and packs in cartons, bundles and souvenir boxes which should be clean and intact.
- 4.9 Art design of the pack, carton and souvenir box must conform to the pattern approved by producer or licensor.
- 4.10 The following materials are used to pack cigarettes:

labels from box cardboard according to GOST 7933;

labels from label paper according to GOST 7625;

labels from double-layer packet paper according to GOST 6290;

labels from single-layer packet paper according to the normative or technical document;

writing paper according to GOST 18510;

foil or metalized paper according to the normative or technical document;

cellulose film according to GOST 7730

wrapping paper according to GOST 8273;

makhorka paper according to the normative or technical document;

tearing tape according to the normative or technical document.

Other packaging materials, including imported ones, corresponding to the normative documents or permitted for use according to the order established in the legislation of the country where the cigarettes are being sold.

- 4.11 Information on consumer packaging of cigarettes should contain the following data:
- 4.11.1 Name of the tobacco product 'cigarettes' (may be placed with some other information about cigarettes: e.g. "20 filtered cigarettes")
- 4.11.2 Brand and/or trademark used by the producer in the order established in the locations of the producer or licensor, who act as owners of this brand or the trade mark.
- 4.11.3 Name and location (legal address legal address including the country) of the producer and the licensor (if the cigarettes were produced under license).
- 4.11.4 In circumstances when the production process, raw and other materials are used, and the quality control of the product at the factories are under control of one company or firm, it is allowed to only indicate the name of the company or firm producing the cigarettes as: "Made under control of (name and legal address, including the country of this organization). This

inscription is followed by indication of the country, in which the cigarettes are produced "Made in (the name of the country)." On the pack, carton or souvenir box, should be placed the name and address of the organization authorized to accept claims from consumers in the country where the cigarettes are sold. (The name and address of the authorized organization can be printed inside the pack, in a place where the consumer can read it.)

- 4.11.5 Presence of the filtering mouthpiece.
- 4.11.6 Number of cigarettes (pieces).
- 4.11.7 Inscription "With menthol" for mentholated cigarettes.
- 4.11.8 Health warning inscription occupying no less than 4% of each largest surfaces of the pack.\*.
- 4.11.9 Tar and nicotine content in the cigarette smoke condensate (milligrams per cigarette), occupying not less than 4% of one of the side panels of the pack.
- 4.11.10 Determination of this standard for cigarettes, produced and consumed in the countries where this standard is in effect.
- 4.11.11 Information about certification of the cigarettes in accordance with normative documents of the country where the cigarettes are sold.

Absence of the conformity sign testifies that the producer has not certified the cigarettes.4.11.12 On the consumer package of the cigarettes there may also be placed additional information that characterizes the product and do not contradict Sections 4.11.1 - 4.11.11.

Placing of any advertising information on the consumers' package is permitted only if the producer or licensor bears documents confirming the reliability of this information.

- 4.11.13 Inscription with the brand is placed on each cigarette.
- 4.12 The information, enumerated in sections 4.11.1 4.11.13, is written in the language of the country where the cigarettes are sold. Texts and inscriptions may be duplicated in foreign languages. The name of the producer and the brand of cigarettes may be placed in Roman letters.
- 4.13 Information should be placed directly on the unit of consumer packaging, pack, souvenir box, carton in one and the same place of the specific brand of cigarettes.4.13.3 If all the information is placed on the pack, souvenir box and block/box, the insert is not appended.
- 4.14 The information may be written in any way and must be clear and legible.
- 4.14.1 Means used to apply the information must ensure durability of the information during storage, transportation and sale of the cigarettes.

The means of applying the information must use the materials that are allowed by Health Care agencies for contact with cigarettes.

4.15 Blocks, cartons, souvenir boxes are packed into cases of corrugated cardboard as per GOST 13511, or veneer cases as per GOST 10131, or into cases specified in other regulatory and technical documents

The packs may be put immediately into transportation packages by agreement with the purchaser.

- 4.16 The cases must be tightly closed in a manner that protects cigarettes during transportation and storage.
- 4.17 The case with the cigarettes must have a marking with the following data:

name and legal addresslegal address of the producer;

brand of cigarettes;

number of the cigarettes in the case;

date of manufacture; month, year

designation of the present standard.

manipulation handling signs: "Protect from moisture", "Protect from heat" according to GOST 14192.

Additional information characterizing the product may also be placed on the case.

### 5. Acceptance rules

- 5.1 The cigarettes must be accepted in batches.
- 5.2 To control the quality, cigarettes are sampled according to GOST 30039. 20 cases are chosen at random from each batch. If the batch consists of less than 20 cases, the sample includes all of them. 20 cases are chosen randomly from a batch. If the batch consists of less than 20 cases, all cases are included into sampling.
- 5.3 In case of a negative result a repeated sampling is carried out and its test results are considered as final.
- 5.4 The batch of products is accepted if it meets the compulsory requirements of the present standard. Each batch is accompanied with the certificate of conformity.

### 6. Methods of control

# 6.1 Sampling

From the cases chosen according to Section 5.2, 20 blocks cartons, bundles or souvenir boxes of the cigarettes are taken at random in a way that equally represents all the cases. From each

selected block carton, bundle or souvenir box, two packs are taken as a laboratory sample. If packs of cigarettes are packed immediately into transportation package - two packs from each case are taken as a sample.

6.2 Determination of the length of cigarettes and filtering mouthpieces

## 6.2.1 Instruments

Calliper according to GOST 166 or other measuring instruments that allow to take measurements with an error not exceeding 0.1 mm.

# 6.2.2 Testing

Two packs are taken at random from the laboratory sample as per Section 6.1, the cigarettes are taken out of them, 10 pieces are selected and their length is measured. Then the filtering mouthpieces are separated and their lengths measured.

# 6.2.3 Processing of the results.

The average value of 10 measurements is considered as a test result. The results are calculated to the first decimal point.

6.3 Determination of tobacco humidity in the cigarettes

#### 6.3.1 Instruments

Desiccator ensuring the necessary drying conditions according to 6.3.2

Laboratory scale as per GOST 24104 (III-IV class) with the maximum weight of less then 200 g and a measuring error of not more than 0.01 g or other scale with a measuring error of not more than 0.01 g.

Trays made of tinplate and having the area of 120±2 sq. cm and the border 10±2 mm high.

Thermometer as per GOST 28498 with measuring range of up to 200° C and point value of 0.5° to 2.0° C.

Hand watch, table clock or other time-measuring devices with an error of not more than 2%.

Providing for accuracy of the results, other measuring instruments and methods of testing may be used.

# 6.3.2 Testing

Ten packs are arbitrarily selected from the laboratory sample as per 6.1, the cigarettes are taken out of them and their paper jacket is carefully cut lengthwise. The tobacco is taken out and mixed.

To determine the humidity, two samples of tobacco of 4-5 g each are placed in dry trays and weighed. Then the trays are placed in the desiccator and desiccated for 30±1 min at the temperature of 108±2° C. Time is counted from the moment when the required temperature is established in the desiccator. Ventilation outlets of the desiccator must be open. When the

desiccation is over, the trays with the tobacco are immediately weighed. The weighing is carried out with an error of not more than 0.01 g.

The results are recorded to the second decimal point.

## 6.3.3 Processing of the results.

The humidity of the tobacco W,% is calculated separately for each sample according to the formula:

m1 - m2

$$W = ---- x 100$$
 (I)

m1 - m

where m1 - weight of the tray with the tobacco before the desiccation, g;

m2 - weight of the tray with the tobacco after the desiccation, g;

m - weight of the empty tray, g;

The test result is calculated as the average value of two parallel determinations and the difference between them must not exceed 0.5%. The calculations are carried out to the first decimal point.

6.4 Determination of mass proportion of dust in the tobacco

### 6.4.1 Instruments

Laboratory balance as per GOST 24104 (III-IV class) with the maximum weight of 1 kg and a measuring error of not more than 0.01 g or other balance with a measuring error of not more than 0.01 g.

Laboratory sieve test with desktop forward movements frequency of 180±5 periods per second or a sifter.

Set of sieves with the diameter of 200±5 mm consisting of:

upper sieve with the size of 1-29-1 x 0.8 or 1-30-1 x 0.8 according to the normative document;

lower wicker sieve made of half-tombac net 028 or 0315 according to GOST 6613;

container to collect the dust.

Stop-watch with a measuring error of not more than 0.2 sec per 1 min.

Sifters of various models with an appropriate sieves set. Time of full separation of the dust for the particular model is established by sifting artificially blended cut filler with the dust content of  $5\pm0.5\%$ .

# 6.4.2 Testing

Two samples of  $50\pm1$  g each are taken from the tobacco as per 6.3.2. Each sample is placed on the upper sieve and sifted during the established time.

The tobacco dust collected in the container is weighed with an error of not more than 0.01 g.

The results of the weighing are recorded to two places of decimals.

Relevant methods of testing are applied when using sifting equipment of different construction.

6.4.3 Processing of the results.

The mass proportion of the dust X, % in the tobacco is calculated separately for each sample according to the formula:

m3

$$X = ---- x 100$$

m4

where m3 - weight of the dust, g;

m4 - weight of the tobacco sample, g.

The test result is calculated as the average value of two parallel determinations and the permissible difference between the numerical values must not exceed 0.5.

The calculations are carried out to one place of decimals.

- 6.5 Determination of nicotine and tar content in the cigarette smoke condensate according to GOST 30570 and GOST 30571.
- 6.6 Inspections on tar and nicotine content in the cigarette smoke, residual quantity of pesticides in raw tobacco are carried out in accordance with the procedure determined by the producer.

## 7. Transportation and storage

- 7.1 The cigarettes are transported by vehicles of all types according to the active rules of cargo transportation for the particular vehicle.
- 7.2 The vehicles must be covered, dry, clean and have no foreign odour.
- 7.3 The cases with cigarettes must be stacked inside the vehicle in the way that prevents the cases of the lower layers from deforming.

- 7.4 Warehouse to store the cigarettes must be dry, clean and have the relative air humidity range of  $60 \pm 10\%$ .
- 7.5 The floor in the warehouse must be set 50 cm above the ground. The cases with cigarettes are laid on the wooden floor, or deck, or wooden beams or any other appropriate materials, not less than 10 cm above the floor with spaces for air circulation.
- 7.6 The cases with cigarettes are put in stacks of the height that prevents the lower case from deforming. The space between the stack and the source of heat or the walls must not be less than one meter.
- 7.7 Perishable products and goods having odour must not be stored in one warehouse with the cigarettes.

# Appendix A

(recommended)

Assessment of appearance of the cigarettes and their package.

Assessment of appearance of cigarettes is recommended to be carried out according to the procedure set forth below. According to this procedure total sum of points of the defects found must not exceed 120.

- A.1 From the laboratory sample as per Section 6.1 ten packing units are taken at random and constitute a sample.
- A.2 Appearance of cigarettes and packs, bundles, carton, souvenir boxes is assessed by showing up possible defects that are divided into three categories according to the degree of their significance: significant, medium and insignificant.

## A.3 The significant defects are:

as for the appearance of the pack, bundle, carton, souvenir box – film covering is broken; a side of the pack, carton, souvenir box has come totally unstuck; cigarettes of other brand in the pack; the cigarette was glued to the pack and has been broken when taken out of the pack; shortage of cigarettes.

as for appearance of the cigarettes – a filter is missing in the filter-tip cigarette; the cigarettepaper is punctured; the seam has come apart along the cigarette; more than 3 mm of the tobacco has poured out; a spot of machine oil of more than 3 mm; foreign matter in the tobacco except for pieces of the cigarette paper.

#### A.4 The medium defects are:

as for the appearance of the pack, bundle, carton, souvenir - several sides of the pack, carton, souvenir box have come partially unstuck; paint stain; printed text on the label is illegible or displaced; the tearing tape is missing;

as for appearance of the cigarettes – the edge of the rim paper has come unstuck; there is no labeling on the cigarette; the end of the cigarette is torn at the length of more than 3 mm; a spot of machine oil of less than 3 mm; pieces of the cigarette paper in the tobacco.

# A.5 The insignificant defects are:

as for the appearance of the pack - slight warping of the pack; the ends of the tearing tape are displaced more than for its width; the tab of the tearing tape is glued; the internal foil or paper pack is crumpled or damaged;

as for appearance of the cigarettes - the cigarette end has a torn edge; the labeling is illegible; a spot of paint; the rim paper has wrinkles; the cigarettes are stained with glue; less than 3 mm of the tobacco has poured out; the end of the cigarette is torn or the seam has come unstuck at the end of it for less than 3 mm.

A.6 The packing units selected as per Section A.1 are examined and the defects found are divided according to the degree of significance. Then the cigarettes are united in one sample and the defects found in them are also divided according to the degree of significance. If the packing unit or the cigarette has several defects of different significance, the assessment is based on a more significant defect. If the packing unit or the cigarette has several defects of the same significance, they are considered as one defect.

A.7 Significant defect scores 10 points, medium one - 3 points, insignificant - 0.3 points.

The defective packs and cigarettes are calculated per category. Overall rating of the cigarette appearance and package is calculated according to the formula:

$$O = 10A + 3B + 0.3C$$
 (A1)

where A - the number of cigarettes and packs with significant defects,

B - the number of cigarettes and packs with medium defects,

C - the number of cigarettes and packs with insignificant defects

On the basis of the agreed international technical standard among the CIS member-states, the governmental agency Armstandard adopted on 11/04/2001 a document, according to which these standards were put into effect since 1/5/2001. Up to 1/1/2003 the transition to the standards has to end