

Pertains to State Standard GOST 3935-2000 Cigarettes. General Specifications

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GOST 3935-2000

INTER-STATE STANDARD

CIGARETTES

General specifications

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Foreword

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Republic of Armenia	Armenian State Committee on Standardization
Republic of Belarus	State Committee on Standardization of the Republic of Belarus
Georgia	State Committee on Standardization of Georgia
Republic of Kazakhstan	State Committee on Standardization of the Republic of Kazakhstan
Kyrgyz Republic	State Committee on Standardization of Kyrgyz Republic
Republic of Moldova	State Committee on Standardization of the Republic of Moldova
Russian Federation	State Committee on Standardization of the Russian Federation
Republic of Tajikistan	State Committee on Standardization of the Republic of Tajikistan
Turkmenistan	Chief State Inspection "Turkmen Standards"
Republic of Uzbekistan	State Committee on Standardization of the Republic of Uzbekistan

3 Ordinance No. 314 of the State Committee on Standardization of the Russian Federation, dated 27 November 2000, put the Inter-State Standard GOST 3935-2000 into effect as direct state standard of the Russian Federation from January 1, 2003.

4 SUPERSEDES GOST 3935-81

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GOST 3935-2000
INTER-STATE STANDARD
CIGARETTES

General specifications

Came into effect: 01.01.2003

1 Field of Application

This standard applies to cigarettes made of a mix of tobacco raw materials after fermentation and other technological processing.

Mandatory requirements to the quality of cigarettes aimed at ensuring safety for user's life and health are stated in 4.1 and 6.5, and the requirements to the marking are stated in 4.11, 4.14 and 4.17.

The mandatory character of other requirements to the quality of cigarettes is established by the legislation of the country where cigarettes are sold to users.

2 Regulatory References

This standard uses references to the following standards:

GOST 166-89 Trammels. Technical specifications

GOST 5709-86 Paper for cigarettes. Technical specifications

GOST 6290-74 Two-layer package paper for packing mouthpiece and other cigarettes. Technical specifications

GOST 6613-86 Square mesh wire fabric. Technical specifications

GOST 7625-86 Label paper. Technical specifications

GOST 7730-89 Cellulose film. Technical specifications

GOST 7933-89 Cardboard for consumer packaging. General technical specifications

GOST 8072-77 Fermented raw tobacco. Technical specifications

GOST 8273-75 Wrapping paper. Technical specifications

GOST 10131-93 Wood and timber-based boxes for products of the industrial food sectors, agriculture and matches. Technical specifications

GOST 13511-91 Corrugated cardboard boxes for foods, matches, tobacco and detergents. Technical specifications

GOST 14192-96 Marking of cargo

GOST 18510-87 Writing paper. Technical specifications

GOST 24104-88 Common and reference laboratory balances. General technical specifications

GOST 28498-90 Glass liquid thermometers. General technical specifications. Methods of testing

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

GOST 30570-98 (ISO 10315-91) Cigarettes. Determination of the nicotine in smoke condensate by gas chromatography

GOST 30571-98 (ISO 4387-91) Cigarettes. Determination of the content of humid and nicotine-free dry condensate (resin) in cigarette smoke by a laboratory smoking machine

3 Definitions

This standard uses the following terms and respective definitions:

A package: a unit of consumer packing made of cardboard, packing or label paper and containing a specified quantity of cigarettes;

A souvenir box: a unit of consumer packing made of box cardboard or other materials with attractive design and containing several packs of cigarettes or cigarettes not packed into packs;

A box: a unit of group consumer packing made of box cardboard or label paper and containing a specified number of packs of cigarettes;

A block: a unit of group consumer packing made of box cardboard containing a specified number of packs of cigarettes wrapped in paper, polymer film or paper tape;

A batch of cigarettes: a quantity of cigarettes of the same brand, same size and type of packing designed for control;

A brand of cigarettes: a specific name of cigarettes with specified consumer properties established by a regulatory and/or technical document;

A trademark: mark registered according to specified procedures and allowing differentiation of one brand of cigarettes, manufactured by some legal entities or natural persons, from cigarettes manufactured by other legal entities or natural persons;

A label for tobacco products: an artistically designed specimen from cardboard, packing or label paper or other materials, used for manufacture of boxes and packs.

4 General Technical Specifications

4.1 Cigarettes must comply with the requirements of this Standard and hygienic requirements to the content of resin and nicotine in smoke, as established by regulatory documents of the countries where the cigarettes are sold.

4.2 Cigarettes are manufactured in different brands. Each brand must differ from other brands in their names and one or several attributes, such as composition, size, presence or absence of a filter, as well as in other consumer properties established by the manufacturer of the products or grantor of license.

4.3 Cigarettes are manufactured using:

fermented raw tobacco per GOST 8072;

tobacco strips according to a regulatory or technical document;

recovered tobacco according to a regulatory or technical document;

tobacco fibres according to a regulatory or technical document;

cigarette paper per GOST 5709;

acetate filters according to a regulatory or technical document;

paper filters according to a regulatory or technical document;

combined filters according to a regulatory or technical document;

polypropylene film according to a regulatory or technical document.

Other raw materials and other materials, including imported ones, can be applied, provided they meet regulatory documents or are allowed for application according to the procedure established by the legislation of the country where cigarettes are sold to users.

4.4. Cigarettes can be manufactured in round or oval shapes, with or without a filter mouthpiece.

4.5. Physical indicators of cigarettes are set within the following limits:

the length of cigarettes: from 45 to 160 mm, with the maximum deviation from the specified value ± 1.0 mm;

the length of the filter mouthpiece: from 12 to 45 mm, with the maximum deviation from the specified value ± 0.5 mm;

tobacco humidity in cigarettes: (13 ± 2) %;

the weight dust share in cigarette tobacco: not more than 3.5%.

4.6 By their appearances, cigarettes must be unbroken and clean with firmly fixed filter mouthpiece. Possible defects in the appearance of cigarettes and packs are established by the manufacturer.

One of the methods used for evaluating the appearance of cigarettes and consumer packing is given in Annex A.

4.7 Attributes of aroma and taste of smoke for each brand of cigarettes are established by the manufacturer or the grantor of license and controlled by tasting. Smells and tastes uncharacteristic of a specific brand of cigarettes are not allowed.

4.8 Cigarettes are packed in packs or souvenir boxes, whereas packs are packed in boxes, blocks or souvenir boxes that must be clean and unbroken.

4.9 Design of a pack, box or souvenir box must meet the specimen approved by the manufacturer or the grantor of license.

4.10 Cigarettes are packed using:

labels from packing cardboard per GOST 7933;

labels from labelling paper per GOST 7625;

labels from two-layer packing paper per GOST 6290;

labels from one-layer packing paper according to a regulatory or technical document;

writing paper per GOST 18510;

polyfoil or metalized foil according to a regulatory or technical document;

cellulose film per GOST 7730;

wrapping paper per GOST 8273;

green tobacco paper according to a regulatory or technical document;

tear strip according to a regulatory or technical document.

Other packing materials, including imported ones, can be applied, provided they meet regulatory documents or are allowed for application according to the procedure established by the legislation of the country where cigarettes are sold to users.

4.11 Information on consumer packing of cigarettes must include the following data:

4.11.1 The name of the tobacco product, "cigarettes". It is allowed to put the name in combination with other information about cigarettes, for example, "20 cigarettes with a filter".

4.11.2 The brand and, if available, the trademark adopted by the manufacturer according to the procedure established in the country of location of the manufacturer or the grantor of license who are owners of this brand or trademark.

4.11.3 The name and the location (legal address, including the country) of the manufacturer and the grantor of license (if cigarettes are manufactured by a license).

4.11.4 If one organization (company or firm) controls the production process, the raw and other materials used, the quality of products at enterprises manufacturing cigarette brands of this organization, it is allowed to indicate on each pack, box or souvenir box only the name of this organization (company or firm) using the inscription "Manufactured under control (followed by the name and the legal address, including the country, of this organization)". This should be followed by the name of the country where cigarettes are manufactured: "Manufactured in (the country)". Each pack, box and souvenir box should also contain the name and address of the organization authorized by the manufacturer to accept claims of the consumers in the country where cigarettes are sold. It is allowed to put the name and address of the authorized organization inside the pack in a place visible for the consumers.

4.11.5 Availability of a filter mouthpiece.

4.11.6 Number of cigarettes (pieces).

4.11.7 The inscription "with menthol" for cigarettes treated with menthol.

4.11.8 Inscriptions warning about harm of smoking that should cover at least 4% of each larger surface of the pack.

4.11.9 Inscription about the content of resin and nicotine in cigarette smoke condensate (in milligrams per cigarette) that should cover at least 4% of one of the side surfaces of the pack.*

4.11.10 Designation of this standard, if cigarettes are manufactured according to this standard.

4.11.11 Information about cigarette certification according to regulatory documents adopted in the country where cigarettes are sold to consumers.

4.11.12 In addition, other information characterising the product and not contradicting 4.11.1-4.11.11 can be put on the consumer packing of cigarettes.

Advertising information is allowed on the consumer packing of cigarettes if the manufacturer or the grantor of license has documents confirming the validity of such information.

4.11.13 Each cigarette should have an inscription indicating the brand of cigarettes.

4.12 Information enumerated in 4.11.1-4.11.13 should be put in the language of the country where cigarettes are sold. The text and inscriptions can be duplicated in foreign languages. The name of the manufacturer, the grantor of license and the brand of cigarettes can be made in Latin letters.

4.13 Information should be placed directly on the unit of the consumer packing (pack, souvenir box, or box) in one and the same place for the specific brand of cigarettes.

* The time of application is established by the authorized bodies of the country where cigarettes are sold to consumers.

4.14 Information can be put by any method and must be clear and legible.

4.14.1 Information must be put using means that ensure its stability during storage, transportation and sale of cigarettes to users.

Means used to put information must be allowed to be used on cigarettes by health authorities.

4.15 Blocks, boxes and souvenir boxes should be placed into transport packing, i.e., boxes made of corrugated cardboard per GOST 13511, plywood per GOST 10131, or boxes according to other regulatory or technical documents.

As agreed by the customer (receiver), packs of cigarettes can be placed into transport packing not in blocks.

4.16 Boxes should be tightly packed to ensure preservation of cigarettes during transportation and storage.

4.17 Boxes with cigarettes must have marking, including the following data:

the name and the legal address of the manufacturer;

the brand of cigarettes;

the number of cigarettes per box;

the month and year of manufacture;

the designation of this standard;

handling signs "Keep from moisture", "Keep from heat" per GOST 14192.

Additional information characterising the products can be put on the box.

5 Acceptance Rules

5.1 Cigarettes are accepted in batches.

5.2 For quality control, cigarettes are sampled per GOST 30039. Twenty boxes are randomly selected from a batch. If a batch includes more than 20 boxes, then all boxes are included into the sample.

5.3 If testing results are negative, a new sampling is made and the results of its test should be final.

5.4 The batch of products is accepted, if it meets the requirements of this standard.

Each batch should include a quality certification document.

6 Control Methods

6.1 Sampling

Twenty blocks of cigarettes, boxes or souvenir boxes are randomly selected from the boxes per 5.2 in such a way that the sample should uniformly represent cigarettes from all boxes. Two packs are taken from each selected block, box or souvenir box, which make a laboratory sample. When packs of cigarettes are packed directly into transportation packing, two packs are selected from each box.

6.2 Determining the Length of Cigarettes and Filtering Mouthpieces

6.2.1 Equipment

A trammel per GOST 166 or other measuring devices that allow measuring within the error of not more than 0.1 mm.

6.2.2 Testing

Two packs are randomly selected from a laboratory sample per 6.1, then cigarettes are taken out, 10 pieces are selected and their length is measured. Then the filtering mouthpieces are separated and their length is measured.

6.2.3 Results processing

The testing result should be the mean arithmetic value from 10 measurements. Calculations are made to the accuracy of one place of decimals.

6.3 Determining Humidity of Tobacco in Cigarettes

6.3.1 Equipment

A drier cabinet ensuring the drying conditions per 6.3.2.

Laboratory balances per GOST 24104, class III-IV, with the weighing limit up to 200 grams, the error not more than 0.01 grams, or other balances with the measurement error not more than 0.01 grams.

White tin trays with the area (120 ± 2) cm² and the side height (10 ± 2) mm.

The thermometer per GOST 28498 with the measuring range up to 200 °C and the value of graduation from 0.5 to 2.0 °C.

Wrist watch, table clock or other timer with the error not more than 2%.

Other measuring devices, testing equipment and testing methods can be applied, provided the accuracy of the results is correct.

6.3.2 Testing

Ten packs are randomly selected from a laboratory sample per 6.1, then cigarettes are taken out and the sleeve is carefully cut longwise. The extracted tobacco is mixed.

For determining humidity, two samples of tobacco of 4-5 grams are taken; they are put into drying trays and weighed. The trays with tobacco are put into the drier cabinet. Drying is made for (30+/-1) minutes at the temperature (108+/-2) °C. the time is counted from the time when the required temperature is set in the cabinet. The cabinet vents must be fully opened. After drying, the trays with tobacco are weighed immediately. All measurements should be made with the error not more than 0.01 grams. The weighing results should be recorded with the accuracy to two points of decimals.

6.3.3 Results processing

Tobacco humidity W , %, should be calculated for each sample separately by the formula

$$W = \frac{m_1 - m_2}{m_1 - m} \times 100, \quad (1)$$

where m_1 is the mass of the tray with tobacco before drying, in g;

m_2 is the mass of the tray with tobacco after drying, in g;

m is the mass of the empty tray, in g.

The testing result should be the mean arithmetic of two parallel determinations with the difference between numerical values not exceeding 0.5. Calculations are made with the accuracy to one point of decimals.

6.4 Determining the Mass Dust Share in Tobacco

6.4.1 Equipment

Laboratory balances per GOST 24104, class III-IV, with the weighing limit up to 1 kg, the measurement error not more than 0.01 grams, or other balances with the measurement error not more than 0.01 grams.

A device for determining the cleanness of tobacco leaves with the frequency of circular progressive motion of the working table (180+/-5) RPM, or a screening machine.

A set of sieves with the diameter (200+/-5) mm, including:

an upper sieve with the sieve plate 1-29-1 x 0.8 or 1-30-1 x 0.8 according to a technical document;

a lower sieve made of low brass mesh 028 or 0315 per GOST 6613;

a tray for dust collection.

A stopwatch with the measurement error not more than 0.2 sec per minute.

Sieving machines of different design with the relevant sets of sieves can also be used. The time of full dust sieving for the specific machine is established by sieving artificial mixes of cut tobacco with the dust content (5+/-0.5) %.

6.4.2 Testing

Two samples of (50+/-1) g each are selected from tobacco per 6.3.2. Each sample is put into the upper sieve and sifted for the specified time. The tobacco dust collected in the tray is weighed with the error not more than 0.01 g. the weighing results are recorded with the accuracy to two points of decimals.

When other sieving machines are used, relevant methods of testing are applied.

6.4.3 Results processing

The mass share of dust X in tobacco should be calculated for each sample separately by the formula

$$X = \frac{m_3}{m_4} \times 100, \quad (2)$$

where m₃ is the mass dust, in g;

m₄ is the mass of the tobacco sample, in g.

The testing result should be the mean arithmetic of two parallel determinations with the difference between numerical values not exceeding 0.5.

Calculations are made with the accuracy to one point of decimals.

6.5. Determination of nicotine and resin in the cigarette smoke condensate per GOST 30750 and GOST 30571.

6.6 Control over the content of resin and nicotine in the cigarette smoke is made according to the procedure established by the manufacturer.

7 Transportation and Storage

7.1 Cigarettes are transported by all types of vehicles according to the rules of cargo transportation applicable for specific transport facilities.

7.2 Transport facilities must be covered, dry and clean and without outside smell.

7.3 Boxes with cigarettes in transport facilities must be placed using methods precluding deformation of the lower boxes.

7.4 Rooms for storage of cigarettes must be dry and clean with the relative air humidity (60+/-10) %.

7.5 The floor in the room must have the height at least 50 cm above the ground level. Boxes with cigarettes are placed on trays, beams or other structures (devices) at least 10 cm from the floor with spacing between them for air circulation.

7.6 Boxes with cigarettes are stacked with the height excluding deformation of the lower box. The distances from the stack to the source of heat and walls must be at least one metre.

7.7 It is not allowed to store in the same room cigarettes and perishable and smelling goods.

Annex A (recommended)

Assessment of the Appearance of Cigarettes and Consumer Packing

The appearance of cigarettes is assessed by the below described methods. According to these methods, the totals cores of identified defects should not exceed 120.

A.1 Ten packs are randomly selected from a laboratory sample per 6.1 and a test sample is prepared.

A.2 The appearance of cigarettes, packs, blocks, boxes and souvenir boxes is assessed by identifying possible defects that are divided into three categories: significant, medium and insignificant.

A.3 Significant defects are:

As regards the appearance of a pack, block, box or souvenir box, it is a broken polymer pack, completely loose sticking on one side of the pack, block, box or souvenir box, inclusion of different brand cigarettes into a pack, sticking of a cigarette to the pack and breaking of the cigarette when removed, or lacking of cigarettes;

As regards the appearance of cigarettes, it is lacking filter in a cigarette, puncture in the cigarette heath, loose sticking along the cigarette length, filler breaking over 3 mm, a machine oil spot over 3 mm, and foreign admixtures in tobacco except for pieces of cigarette paper.

A.4 Medium defects are:

As regards the appearance of a pack, block, box or souvenir box, it is partially loose sticking on several sides of a pack, block, box or souvenir box;

Contamination with paint; unclear or displaced stamp on the label; or lacking tear strips;

As regards the appearance of cigarettes, it is loose rim paper, lacking marking of the cigarette, torn end of the cigarette over 3 mm, a machine oil spot over 3 mm, and pieces of cigarette paper in tobacco.

A.5 Insignificant defects are:

As regards the appearance of a pack, it is a slightly skewed pack, displaced ends of the tear strip by more than its width, sticking tear-end of the tear strip, and smashed or damaged foil or paper inner pack;

As regards the appearance of cigarettes, it is an uneven edge, smeared marking, a paint spot, folds on the rim paper, glue in cigarettes, filler breaking over 3, or torn end or loose seam at the end of the cigarette up to 3 mm.

A.6 Packs selected as specified in A.1 shall be inspected and the identified defects shall be classified by their significance. Then cigarettes shall be taken as one sample and their defects shall be identified, also divided by their significance. If a pack or a cigarette has several defects of various significance rates, then it shall be assessed by

the greater defect. If a pack or a cigarette has several defects of the same significance, then they shall be assessed as one defect.

A.7 The significant defect shall be assessed as 10 score points, the medium defect as 3 points, and the insignificant defect as 0.3 points.

The number of defective packs and cigarettes of each category shall be counted. The general appearance of cigarettes and packs shall be calculated by the formula

$$O=10A + 3B + 0.3C, \quad (A.1)$$

where A is the number of cigarettes and packs with significant defects;

B is the number of cigarettes and packs with medium defects; and

C is the number of cigarettes and packs with insignificant defects.

Annex B (for reference)

The List of Regulatory or Technical Documents in Force in the Russian Federation

GN 2.3.2.002-95 The allowed limit levels of resin and nicotine in tobacco products

TU 10-04-09-02-86 Recovered tobacco

TU 10-048497-01-89 Paper filters for cigarettes

TU 48-21-605-82 Aluminium polyfoil for tobacco industry

TU 13-7310005-52-82 Green tobacco paper

TU 23.2-2068-89 Screen surfaces

GOST R 51087-97 Tobacco products. Information for users

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