

Mongolian standard MNS 5024 2008 regarding cigarettes technical general requirements.
Dated 28 February 2008.

[Coat of Arms]

STANDARD OF MONGOLIA

Agriculture

Cigarettes

General technical requirements

MNS 5024:2008

Official publication

[Stamp]

NATIONAL CENTRE FOR STANDARDISATION AND METROLOGY

Ulaanbaatar

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FOREWORD

The National Centre for Standardisation and Metrology (NCSM) is a member of the International Organisation for Standardisation and manages national standards policy in cooperation with governmental and non-governmental organisations.

National standards projects are prepared by the Technical Committee (TC) responsible for standards in the relevant fields and executed by the Sub Committee (SC). The Technical Committee proposes a standard if more than 75% of its members vote in favour of it and the standard become effective when it is debated and approved by the National Council for Standardisation and Metrology (NCSM).

“The National Standard for Cigarettes. General Technical Requirements” has been prepared by the working group responsible for implementing the Tobacco Regulatory Law in the relevant fields adopted by Decree No. 222 signed by the Minister of Health in 2007.

The standard was debated at and supported by the joint meeting of the Technical Committees on Agriculture and Health Standards.

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STANDARD OF MONGOLIA

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Cigarettes. Technical general requirement	MNS 5024:2008 instead of MNS 5024:2001
Cigarettes. Technical general requirement	

Approved by Resolution of the National Council of Standardisation and Metrology
Ref. No 7 dated 28 February 2008.

The normative requirements of this standard are binding.

Appendix B to this standard becomes effective as of 1 January 2010.

1. PURPOSE

The purpose of this standard is to specify requirements for the production, import and sale of cigarettes and to protect the public health from the hazards of tobacco.

2. SCOPE OF APPLICATION

2.1 The standard shall apply to production, packaging, labelling, quality control, storage, transportation and sale of cigarettes.

2.2 The standard shall be complied with by manufacturers, importers, distributors, consumers and shall apply to all control and certification procedures.

3. NORMATIVE REFERENCES

The following standards and documents are the references for this standard, and if any changes are made to the standards and related documents, the most recent edition shall be used as the reference for this standard.

- MNS ISO 10815: 2001. Tobacco and tobacco products – Vocabulary
- MNS ISO 10315: 2001. Cigarettes – To determine the amount of nicotine in tobacco smoke condensate. Gas-chromatographic method
- MNS ISO 8243: 2001. Cigarettes – Sampling
- MNS ISO 3308: 2001. Smoking machine for lab – Definition and specifications
- MNS ISO 4387: 2001. Cigarettes – To determine nicotine-free dry particulate matter (tar) using the smoking machine
- MNS 5549: 2006. Thin layer chromatographic method to determine aflatoxins B1, B2, G1 and G2 in food products
- MNS 5127: 2002. Tobacco and tobacco products. To determine humidity. Weighing method
- MNS 5128: 2002. Tobacco and tobacco products. To determine the amount of nicotine and tar. Weighing method
- MNS 5129: 2002. Tobacco and tobacco products. Determination of organochlorine pesticide residues -- Thin layer chromatographic method
- MNS 5130: 2002. Tobacco and tobacco products. Determination of organophosphorous pesticide residues -- Thin layer chromatographic method
- MNS CAC/RCP 1: 2003. General principles of food hygiene
- MNS 4244: 1994. Labour safety standards. General fire safety requirements

- MNS 4968: 2000. Safe operation. Health. General requirements and norms, general requirements for measurement methods
- MNS 5364: 2004. Food product storage. General technical requirements

4. TERMS AND DEFINITIONS

The terms used in this standard are defined according to MNS-ISO 10815: 2001. Tobacco and tobacco products – Vocabulary.

4.1 Cigarette

A product that is prepared by rolling technologically processed tobacco leaves in a wrapper of thin paper and is designed for smoking with filter.

5. TECHNICAL GENERAL REQUIREMENT

5.1 Cigarettes shall be produced by a factory that complies with standard “MNS 4968: 2000. Safe operation. Health. General requirements” with respect to approved technologies, formulas and ingredients.

5.2 Raw materials and auxiliary materials to be used in cigarette production shall comply with standard "MNS CAC/RCP 1: 2003. General principles of food hygiene”.

5.3 Shall maintain files of applicable documents on imported cigarettes concerning product quality and safety issued by the respective authority of the country that produced the cigarettes.

5.4 The physical specifications of cigarettes shall be in accordance with Table 1.

Physical Specifications of Cigarettes

Table 1

No	Parameter	Unit of measurement	Specification limits
1	Total length of cigarette	mm	$(83.5 - 100.5) \pm 0.5$
2	Length of filter section of cigarette	mm	$(21 - 32) \pm 0.5$
3	Length of tobacco section of cigarette	mm	$(53 - 66) \pm 0.5$
4	Diameter of cigarette	mm	$(4 - 9) \pm 0.2$
5	Weight of 1 cigarette	g/piece	$(0.5 - 0.9) \pm 0.05$
6	Humidity of cigarette	%	13 ± 2

5.5 Cigarette shall be intact and shall be filled evenly across the smoking section.

5.6 A ring shall be firmly affixed to the body of a cigarette without wrinkling or folding it.

5.7 The permissible amounts of chemicals found in cigarettes shall comply with the limits specified in Table 2.

**Chemical Specifications of Cigarettes
Table 2**

No	Specifications	Unit of measurement	Permissible maximum amount	
1	Tar	mg/piece	14.0	
2	Nicotine	mg/piece	1.3	
3	Carbon monoxide	µg/kg	20.0	
4	Aflatoxins B1 and B2	µg/kg	5.0	
5	Pesticide	organochlorine	mg/kg	0.1
		organophosphorous	mg/kg	0.2
6	Cumulative gamma activation (control level)	Bq/g	250.0	
7	Narcotics	-	must not be present	

6. QUALITY CONTROL AND COMPLIANCE

The appearance of cigarette (cigarette paper and pack) shall comply with Appendices A and B and the quality of cigarette shall comply with the following standards:

6.1 MNS 5127: 2002. Tobacco and tobacco products. To determine humidity. Weighing method

6.2 MNS 5128: 2002. Tobacco and tobacco products. To determine the amount of nicotine and tar. Weighing method

6.3 MNS 5129: 2002. Tobacco and tobacco products. Determination of organochlorine pesticide residues -- Thin layer chromatographic method

6.4 MNS 5130: 2002. Tobacco and tobacco products. Determination of organophosphorous pesticide residues -- Thin layer chromatographic method

6.5 MNS ISO 10315: 2001. Cigarettes – To determine the amount of nicotine in tobacco smoke condensate. Gas-chromatographic method

6.6 MNS 5549: 2006. Thin layer chromatographic method to determine aflatoxins B1, B2, G1 and G2 in food products

6.7 MNS ISO 4387: 2001. Cigarettes – To determine nicotine-free dry particulate matter (tar) using the smoking machine

7. PACKAGING AND LABELING

7.1 Cigarettes shall be packaged 20 per pack, minimum.

7.2 The health warning message shall consist of a graphic image depicting health hazards caused by direct and indirect smoking, main and explanatory texts.

7.2.1 Health warning messages shall be printed on the front and the back or on the two largest surfaces of a cigarette pack or carton.

7.2.2 Health warning messages shall be placed such that they are not damaged when the pack or carton is opened.

7.2.3 Health warning message shall be in accordance with the designs provided in Appendix B.

7.2.4 Three out of six types of health warning messages shall be selected for a brand of cigarettes that is manufactured or imported and shall be used in equal proportions for the brand.

7.2.5 The health warning message shall be placed on the lower part of the cigarette pack surface and shall take up at least one third of the surface.

NOTE: The message shall have at least a height of 3.3 cm, a width of 5.5 cm or an area of 18.15 cm² on the surface specified in 7.2.1.

7.2.6 The graphic image and main and explanatory texts of a health warning message shall be equal in terms of area. The word "WARNING" shall be printed in upper case and in 8-point Arial font, the main text shall be printed in upper case and in 9-point Arial font, the explanatory text shall be printed in lower case and in 5-point Arial font.

7.2.7 The health warning message shall be printed in 4 colours that are visible and are equal to those in Appendix B and shall have a 1 mm wide black frame.

7.2.8 The word "**warning**" in the main text of the health warning message shall be printed in red on a black background and the main and explanatory texts shall be printed in white on a black background.

7.3 The following information shall be printed in Mongolian language on the side surfaces of a cigarette pack or carton:

- Expiration date;
- Date of manufacture;
- Name of Manufacturer/Importer;
- Content of toxic substances (tar and nicotine) per cigarette;
- National standard number

NOTE: National standard number shall be printed only on products produced by domestic manufacturers.

7.4 It is prohibited to use language that implies certain cigarettes are less damaging to health than others, or its equivalents including through the use of symbols, images, colours or combinations thereof on any cigarette pack or carton.

7.5 The health warning message design templates (Appendix B) shall be obtained from the National Centre for Standardisation and Metrology on CD.

8. SAMPLING

Sampling shall be performed in accordance with standard "MNS ISO 8243: 2001. Cigarettes – Sampling".

9. TRANSPORTATION AND STORAGE

9.1 Cigarettes shall be transported in compliance with all applicable regulations.

9.2 Cigarettes shall be stored in a warehouse in compliance with “Specialised Warehouse – Warehouse designed for storing certain groups of goods that require special storage conditions (temperature/humidity controlled, etc.) and regime” as specified in Paragraph 4.6 of “MNS 5364: 2004. Food product storage. General technical requirements”.

9.3 The storage facility shall maintain a relative humidity of 65 ± 5 % and ambient temperature of between 17°C and 20°C.

9.4 Cigarettes may be stored for up to 2 years from date of manufacture.

9.5 Large cartons of cigarettes shall be placed away from direct sunlight, on wooden pallets at least 10 cm from the floor, at least 20 cm any source of heat, and in a manner that air may freely flow between them.

END.

**APPENDIX A
(informative)**

EVALUATION OF APPEARANCE OF CIGARETTES

Cigarette appearance shall be evaluated using the following criteria. Total damage and defect points calculated using this method shall not exceed 120.

A.1. 10 packs of cigarettes shall be taken as test samples.

A.2. The damage and defects on the surface of a cigarette pack shall be evaluated at 3 levels, i.e. major, moderate and minor.

A.3. Major damage and defects

Pack surface: cover of pack is not intact, adhesion of any of the sides of the pack is failing, a cigarette of another brand is present in the pack, cigarettes are missing from the pack, and/or cigarettes are so stuck together or so stuck to the inner paper of the pack that their general form is altered.

Cigarette appearance: the filter is missing from a filtered cigarette, the cigarette paper has a hole or has yellowed, adhesion of cigarette paper is failing along cigarette length, and/or the cigarette has different admixtures (except pieces of cigarette paper).

A.4. Moderate damage and defects

Pack surface: adhesion of any of the sides of the pack is partially failing, the pack opening ribbon is missing, the trademark and/or text on the label is dislocated or illegible.

Cigarette appearance: the end of the cigarette paper has a hole or is frayed, the brand name is missing from the visible surface of the cigarette, machine oil stains do not exceed 3 mm, there are pieces of cigarette paper inside the cigarette, and/or the butt of the cigarette is torn less than 3 mm.

A.5. Minor defects

Pack surface: the form of the pack is slightly deviated, the ends of the pack opening ribbon cross each other slightly, and/or the protective paper is wrinkled or damaged.

Cigarette appearance: the brand name is not legible, the cigarette paper is torn, the cigarette paper is wrinkled, and/or the adhesion of the end of the cigarette has failed up to 3 mm.

A.6. The 3 types of cigarettes that were collected in accordance with A.1. and evaluated shall be classified into 3 groups, again according to their defects. If several types of damage or defects are detected in a pack or a cigarette, that pack or cigarette shall be considered to be the pack or cigarette with the most defects. If a pack or a cigarette presents several defects of a single type, that pack or cigarette shall be considered to have a single kind of damage.

A.7. Major damage and defects have 10 points, moderate damage and defects have 3 points and minor damage has 0.3 points; total damage and defect points determined by this method shall not exceed 120. The number of packs and cigarettes

MNS 5024: 2008

with damage and defects shall be calculated for each type. The overall grade of appearance for cigarettes and cigarette packs shall be calculated using the following formula.

$$O=10A + 3B + 0.3C$$

Notes:

- A – Number of cigarettes and packs with major damage and defects
- B – Number of cigarettes and packs with moderate damage and defects
- C – Number of cigarettes and packs with minor defects

**APPENDIX B
(Normative)**

DESIGNS FOR HEALTH WARNING MESSAGES

1. Smoking causes heart attacks.

Smoker's heart	Healthy heart	<p>WARNING SMOKING CAUSES HEART ATTACKS. Decrease in oxygen to the heart causes organ atrophy and myocardial and brain infarction.</p>
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2. Smoking causes 90% of lung cancer.

Smoker's lung	Healthy lung	<p>WARNING SMOKING CAUSES 90% OF LUNG CANCER. Nine out of ten people with lung cancer are smokers.</p>
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3. Smoking causes lip and oral cancer, gum disease and loss of teeth.

	<p>WARNING SMOKING CAUSES LIP AND ORAL CANCER, GUM DISEASE AND LOSS OF TEETH. Smoking causes inflammation of gums and loosening of teeth, followed by loss.</p>
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4. Smoking aggravates diabetes.

	<p>WARNING SMOKING AGGRAVATES DIABETES. Smoking clogs peripheral and main arteries and increases the risk of having legs amputated, as well as blindness.</p>
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5. Smoking causes impotence.

	<p>WARNING SMOKING CAUSES IMPOTENCE. Smoking decreases the blood supply to genital organs.</p>
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6. Smoking harms your baby.

	<p>WARNING SMOKING HARMS YOUR BABY. Smoking has negative effects on foetal growth by reducing the blood supply and causing deficiency of oxygen and nutrients to the foetus.</p>
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MNS 5024: 2008

_____ Front

_____ Brand name of cigarette

_____ Health warning message

WARNING
SMOKING HARMS YOUR
BABY.
Smoking has negative effects
on foetal growth by reducing
the blood supply and causing
deficiency of oxygen and
nutrients to the foetus.

_____ Back

_____ Brand name of cigarette

_____ Health warning message

WARNING
SMOKING HARMS YOUR
BABY.
Smoking has negative effects
on foetal growth by reducing
the blood supply and causing
deficiency of oxygen and
nutrients to the foetus.

Appendix B becomes effective as of 1 January 2010.