

Syrian Arab Republic Ministry of Industry Syrian Arab Organization for Standardization and Metrology	Subject: Tobacco and Tobacco Products (Cigarettes) First Revision	Syrian Standard Specification 2656 / 2006
		ICS: 65. 160
		S.N.S: 2656 / 2006

Tobacco and tobacco products: Cigarettes First revision.

1. Scope*

This Syrian standard specification concerns cigarettes prepared mechanically and made from domestic tobaccos. It includes additives, testing methods, packaging, and the data label.

2. Definitions

- 2.1 Cigarettes (rolled tobacco in paper):
This is a product made from a tobacco mixture after preparing it by adding special washing materials to it, cutting it into strips, adding fragrance to it, adding auxiliary materials and preservatives, packaging it mechanically, wrapping it in cylindrical rolls of cigarette paper, and providing it with a filter so that it becomes suitable for smoking directly.
- 2.2 Tobacco mixture:
This is the special mixture for each type of cigarette. It consists of certain kinds of tobacco in accordance with their grades and with certain percentages of each grade and variety after natural or artificial fermentation.
- 2.3 Tobacco nicotine:
This is the content of nicotine alkaloids retained by a filter of cellulose fibers when the smoke passes through it.
- 2.4 Tobacco tar:
This is the total amount of particles of matter retained by a filter of cellulose fibers when the smoke passes through it after removal of all the nicotine alkaloids and the water content.

Approval Decision No.	Approval Date	Mandatory Application
314	November 14, 2006	

Syrian Arab Organization for Standardization and Metrology

Note: The issuance of the Syrian Standard Specification for Cigarettes does not mean that smoking is not harmful, but rather, this specification has been devised to describe that product.

2.5. Carbon monoxide:

This is the weight of carbon monoxide produced from the burning of one cigarette.

2.6. Tobacco moisture:

This is the percentage by weight of the volatile part of the tobacco when it is dried for 16 hours at a temperature of 100° C.

3. General Requirements

3.1. Requirements for tobacco used in the manufacture of cigarettes:

3.1.1. It must be clean and free of parasites, viral infections, germs, decay, insects in their various stages, and foreign materials, either vegetable or non-vegetable – anything that does not belong to the tobacco plant itself.

3.1.2. There must be stability of the composition and components of the mixture, thereby ensuring the stability of the sensory and taste characteristics of the single mixture when smoking tobacco cigarettes made from it.

3.1.3. The manufacturing process and handling of the tobacco must be done in such a way that there are no negative impacts on its manufacture or on the quality of the cigarettes produced. Furthermore, it is forbidden to use cigarette end tobacco or any tobacco that has undergone any process that would cause a change in the basic characteristics of the final product.

3.1.4. There must be stability of the general characteristics of the tobaccos that constitute the mixture and stability of the quality grade specifications of each type.

3.1.5. The tobacco that constitutes the mixture must be free of strange smells that are different from the special aroma of each variety.

3.1.6. When adding ribs from tobacco leaves to the mixture, the ribs shall be squeezed to a maximum thickness of 0.6 mm, and then chopped to the same width as the tobacco hairs.

3.1.7. Certain materials can be added to sweeten, perfume, and preserve the tobacco so that the additive leads to improving the sensory and taste characteristics of the tobacco when it is smoked, as long as burning it along with the tobacco does not produce any substances that are hazardous to general health during smoking and provided that it has received approval of the health authorities.

- The percentage of substances added to the tobacco used in the manufacture of cigarettes must not exceed 21% by dry weight and they must not produce substances harmful to health when they are burned.
- These added substances include:

- A. Sugar substances like raw sugar, white sugar (glucose, which is an inverted monosaccharide), honey, blackstrap, or molasses, provided these additives constitute a maximum of 7% of the weight of the tobacco, calculated on the basis of glucose.
 - B. Moisture retention agents: We use 1 2-propylene glycol to help retain moisture in tobacco, provided that the maximum percentage of this additive is 7.5% of the tobacco by weight. Pure glycerin can also be used as an agent for the retention of moisture in tobacco, provided that the maximum percentage of this additive is 3% of the tobacco by weight.
 - C. Perfuming (flavoring) agents: These are natural or synthetic substances that include essential oils, perfumes, herbal extracts, fruit extracts, resins, wine or alcohol, or artificial flavoring agents. The maximum percentage of all perfuming agents is 2% of the tobacco by weight.
 - D. Preservatives: Any permitted preservative can be added at its specified percentage, including sodium benzoate, which can be added at a maximum of 2% of the tobacco by weight.
 - E. Auxiliary substances: Substances that help facilitate burning can be added at a maximum of 2.5% of the tobacco by weight.
 - F. Permissible deviations in the analysis of tobacco cigarette samples:
 - 1. Exceeding the maximum percentage of total added sugaring agents by 20% is permitted.
 - 2. Exceeding the maximum percentage of moisture retention agents by 20% is permitted.
 - 3. Exceeding the maximum percentage of total added perfuming agents by 20% is permitted.
 - 4. The total of all additives must not exceed 15% of the maximum total for all additives combined.
- 3.1.9. [sic] Tobacco used in the manufacture of cigarettes must meet the requirements specified in the following table:

Requirements	Maximum
Percentage of fine tobacco that passes through the sieve with openings of 425 microns (based on dry weight)	5%
Percentage of total ash (based on dry weight)	25%
Percentage of moisture	11-15%
Percentage of undissolved ash in acid (silica) (based on dry weight)	3%
Percentage of nicotine (based on dry weight)	3.5%
Width of the cut tobacco used	0.5-1 mm

- 3.2. Mandatory requirements for cigarettes.
- 3.2.1. The tobacco in the product must be free of foreign materials, whether vegetable or non-vegetable, that are not from the pure tobacco, other than what is permitted.
- 3.2.2. Cigarettes must be clean and free of decay and insects in their various stages.
- 3.2.3. The product must be free of any strange smells other than those by which the cigarette's components are distinguished.
- 3.2.4. The cigarette must provide a filter at one end. Any permitted substances can be added to increase the blocking of harmful substances that emanate from the burning of the tobacco (the manufacture of cigarettes without a filter is prohibited).
- 3.2.5. Cigarettes can be produced with various lengths and diameters as long as the length of any cigarette is at least 55 mm, not counting the filter.
- 3.2.6. Cigarettes must be free of perforations and side ventilation points with the exception of the special porosity of internationally recognized and approved cigarette papers and the filter.
- 3.2.7. Cigarettes must be free of manufacturing defects and excrescences during cutting and adhesion defects (whether between the filter and the column of tobacco or the fitting of the cigarette paper) and they must be filled evenly.
- 3.2.8. The burning of the paper and the tobacco in the cigarette must be even and uniform, and the embers from the cigarette must not separate while burning.
- 3.2.9. The proportion of the weight of the cigarette paper to the whole cigarette (not counting the filter) must not be more than 7-8% (weight / weight) based on the dry weight.
- 3.2.10. The draw resistance of the whole cigarette must be 50-160 ml/second, except for light cigarettes.
- 3.2.11. The filtration efficiency of the filter must be at least 25%.
- 3.2.12. The maximum percentage of reconstituted tobacco flakes (folio) is 30% (weight / weight).

- 3.2.13. Cigarettes must be round, cut, and with a diameter of about 8 mm or less.
- 3.2.14. The bulk density of cigarette tobacco must be at least 0.18 gm / cm³ based on a degree of moisture of 13.5%.
- 3.2.15. During manufacture, the permissible rate of deviation in length, diameter, and weight of the tobacco for cigarettes of one type or one batch in a random sample must not exceed:
- Length: ± 1.5%
- Circumference: ± 2%
- Tobacco weight: ± 5%
- 3.2.16. The rate of tobacco loss from the ends of the cigarettes in a single package must not exceed 0.4% of the cigarettes equipped with a filter based on the average weight of the cigarette and the tobacco in the sample drawn, based on the dry weight.
- 3.2.17. The moisture of the tobacco in packed cigarettes that are ready in factory warehouses, marketing warehouses, or retailers must be at least 10% and a maximum of 12%.
- 3.2.18. [sic] The length of a tobacco cigarette with a filter (short) is set at 80 mm whole, long 100 mm whole; and the length of the filter is 15 mm for short cigarettes and 20 mm for long cigarettes. A deviation of ± 2% is permitted in the length of the whole cigarette in random samples.
- 3.3. Requirements involving the smoke produced by smoking domestic and foreign cigarettes.
- 3.3.1. For imported foreign cigarettes:
1. Starting in 2002, the percentage of nicotine must not exceed a maximum of 1 mg / cigarette.
 2. Starting in 2002, the percentage of tar must not exceed a maximum of 13 mg / cigarette. In 2008, this number will become a maximum of 10 mg / cigarette.
 3. Starting in 2002, the percentage of carbon monoxide that passes to the smoker must not exceed a maximum of 12 mg / cigarette. This number will become a maximum of 11 in 2006 and a maximum of 10.5 in 2007.
- 3.3.2. For domestic cigarettes:
- These percentages must be achieved by reducing the number of years, as follows:

Effective Date	1/1/2002	1/1/2003	1/1/2004	1/1/2005	1/1/2006	1/1/2007	1/1/2008
	Materials / cigarette						
Nicotine	1.75	1.5	1.4	1.2	1.2	1.1	1
Tar	28	25	22	19	16	13	10
CO	15	14	13	12	11	10.5	10

4. Taking Samples

According to International Organization for Standardization specification ISO 8243.

5. Examination and Testing Methods

Samples taken in accordance with Item 4 will undergo the necessary testing to confirm the extent to which the product conforms to the items of the specification. This will be done in accordance with the following specifications:

1. Determination of the nicotine content in accordance with International Organization for Standardization specification ISO 10315
2. Determination of the tar content in accordance with International Organization for Standardization specification ISO 4387
3. Determination of the carbon monoxide (CO) content in accordance with International Organization for Standardization specification ISO 8454
4. Cigarettes and filters – measurement of nominal diameter in accordance with International Organization for Standardization specification ISO 2971
5. Materials used as cigarette papers – Determination of water permeability in accordance with International Organization for Standardization specification ISO 2965
6. Taking samples from batches of the raw material – General principles in accordance with Gulf Specification No. 295 / 94
7. Determination of the water content – Karl Fischer method in accordance with International Organization for Standardization specification ISO 760
8. Determination of the alkaloids in condensates of cigarette smoke – spectrophotometer method in accordance with International Organization for Standardization specification ISO
9. Air conditioning and testing in accordance with International Organization for Standardization specification ISO 3402
10. Determination of the silica content in accordance with Gulf Specification No. 296 / 94

6. Packaging

- 6.1. Cigarettes must be packaged in suitable packets of cardboard, aluminum sheets, or any other suitable material. These packets must be lined on the inside with sheets of paper, metal, or any other suitable material as a liner for these packets.
- 6.2. The packets must be sealed with sheets of cellophane, polypropylene, or other material that will serve the same purpose and they must provide a special strip for opening the packet when it is used.
- 6.3. The sealed packets must be packaged in suitable packages of paper or cardboard (carton) and this carton must be covered with sheets of cellophane or another similar material to preserve the moisture of the cigarettes.

7. Transportation and Storage

Cigarettes must be transported and stored in clean locations and at normal room temperature.

8. Label Data

Explanatory data must be written in Arabic and can also be written in another foreign language next to the Arabic.

- 8.1. The product name and brand name, such as "Alhamraa Cigarettes," "Alsharq cigarettes," or "Alsham cigarettes."
- 8.2. Product type: e.g., filter cigarettes, etc.
- 8.3. Name of manufacturer and country of origin.
- 8.4. Number of cigarettes: e.g., "Twenty cigarettes per packet."
- 8.5. Packaging date (month and year) and shelf life.
- 8.6. Nicotine, tar, and carbon monoxide content in the cigarette smoke. In the case of cigarettes with ventilation channels, the average percentage before and after the channels are closed must be mentioned.
- 8.7. The statement "For sale in the Syrian Arab Republic" must be mentioned (for imported products).
- 8.8. There must be a warning label as follows:
 - 8.8.1. The warning must include the following statement: "Smoking is a primary cause of cancer, lung disease, and cardiovascular disease, and is harmful to pregnant women and the unborn baby."
 - 8.8.2. The warning must be printed on the front face of the cigarette packet in Arabic together with any other foreign language.
 - 8.8.3. The warning must be printed clearly and legibly and it must not affect the color of the cigarette packet or the color of the text on the position of the warning.
 - 8.8.4. The warning must cover an area of at least 30% of the front face of the packet.
 - 8.8.5. The warning can include some explanatory pictures or drawings next to the statement referred to in Paragraph 8.8.1.
- 8.9. No statement may be used that gives, directly or indirectly, the false impression that a tobacco product is less harmful than another, such as statements like "Low tar," "Light," "Very light," "Mild," etc.).
- 8.10. The batch number.

9. Technical terms

Cigarette end tobacco	تبغ متخلف عن التدخين
Embers	جمرة الاحتراق
Tar	قطران
Voids	فراغات
Filteration efficiency	كفاءة الترشيح
Filter	مرشح
Burn rate	معدل احتراق
Resistance of draw	مقاومة السحب
Cigarette ends	نهايات السجائر
Nicotine	نيكوتين
Cigarette wrapping paper	ورق لف السجائر
Flavowring agents	مواد منكه

10. References

- Gulf Standard Specification No. 597 / 1995.
- Jordanian Standard Specification No. 446 / 1997.
- Draft Specification submitted by the General Tobacco Institute.
- World Health Organization Framework Convention on Tobacco Control 2003.

11. The Agencies that Helped to Draft the Specification

- Syrian Arab Organization for Standardization and Metrology.
- General Tobacco Institute.
- Ministry of Health.
- Ministry of Agriculture
- The University of Damascus School of Agriculture