

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية  
GCC STANDARDIZATION ORGANIZATION (GSO)



**GSO 597/2009 (E)**

السجائر  
**Cigarettes**

ICS : 65.160

## **Cigarettes**

**Date of GSO Board of Directors' Approval** : 29/5/1430h (24/5/2009)  
**Issuing Status** : Technical regulation

**Foreword**

Standardization Organization for GCC (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulation through specialized technical committees (TCs).

GSO through the technical program of committee TC No.: (5) " Technical Gulf committee for food and agriculture product standards " has updated the GSO Standard No. : GSO 597/2006 " Cigarettes" . The Draft Standard has been prepared by (State of Qatar) .

This standard has been approved as a Gulf Technical regulation by GSO Board of Directors in its meeting No. (10), held on 29/5/1430h (24/5/2009) . The approved standard will replace and supersede the standard No . GSO 597/2006 .

## Cigarettes

### 1. Scope and field of application:

This Gulf Standard is concerned with cigarettes manufactured from tobacco and prepared by mechanical methods.

### 2. Complementary Standards:

- 2.1 GSO / ISO 3400: "Tobacco and tobacco products – Determination of alkaloids in cigarette smoke condensates – Spectrophotometer methods".
- 2.2 GSO / ISO 8423: "Tobacco and tobacco products – Determination of water content (Karl Fischer method).
- 2.3 GSO / ISO 4283: "Cigarettes – Sampling".
- 2.4 GSO / ISO 4387: "Cigarettes – Determination of total and dry particulate matter using a routine analytical cigarette smoking machine".
- 2.5 GSO / ISO 8454: "Cigarettes – Determination of carbon monoxide in the vapor phase of smoke – Non dispersive infrared (NDIR) method".
- 2.6 GSO / ISO 2971: "Tobacco and tobacco products – Cigarettes and filters - Determination of nominal diameter – Method using a laser beam measuring apparatus".
- 2.7 GSO / ISO 2817: "Tobacco and tobacco products – Determination of silica content".
- 2.8 GSO / ISO 6565: "Tobacco and tobacco products – Draw resistance of cigarettes and filters rods – Definition, standard conditions and general aspects"
- 2.9 GSO (950): "Tobacco and tobacco products – Determination of nicotine with chemical methods".
- 2.10 GSO 246" Labeling of tobacco products " .
- 2.11 GSO / ISO 3402: "Tobacco and tobacco products – Atmosphere for conditioning and testing ".
- 2.12 GSO / ISO 2965: "Material used as cigarette papers – Determination of air permeability ".
- 2.13 GSO / ISO 10315: "Determination of nicotine in smoke condensate – Gas Chromatographic methods"
- 2.14 Gulf standard which GSO shall be approved concerning with: Permissible additives in tobacco products.

### 3. Definitions:

#### 3.1 Cigarettes:

One of the tobacco products ready for smoking, it is a longitudinal paper roll of a cylindrical or oval cross – section which contains pieces of tobacco arranged in

such a manner as to be suitable for direct smoking, It is produced with or without a filter. The filter tip may be normal or with side ventilation channels.

3.2 Tobacco:

A Product obtained form a blend of species *Nicotiana Tabacum* and / or *Nicotiana Rustica* which has been flue – cured, air cured, fire cured or sweltered.

3.3 Smoke Tar:

The total particulate matter retained by filter smoke trap, after deduction of its nicotine alkaloids and water content according to the Gulf standard mentioned in (2.4).

3.4 Smoke Nicotine:

The nicotine alkaloids content retained by filter smoke trap when smoke passes through it in according with the Gulf standard mentioned in (2.1).

3.5 Carbon Monoxide:

The weight of carbon monoxide delivered per cigarettes according to the methods given in the Gulf standard mentioned in (2.5).

3.6 Moisture of Tobacco:

The percent by weight of volatile fraction of tobacco when dried at 100 °C for 16 hours .

3.7 Labeling:

Any label, mark, photo or any other description label written, sealed or placed on the container.

3.8 Label:

Any written, photos or picture on the labeling .

**4. Requirements:**

4.1 Requirements of tobacco used in the manufacture of cigarettes:

The following requirements shall be met in tobacco used in the manufacture of cigarettes:

4.1.1 It shall be clean, free form parasites, virus infestation, spores, mould, insects and foreign materials.

4.1.2 Processing or treatment of tobacco shall be carried out in such a way as not adversely affect its manufacturing or smoking quality, It is as not to allowed to use cigarette stubs' tobacco or any other tobacco that has been subjects to any treatment which may alter the essential characteristic of the final product in manufacturing process.

4.1.3 Additives content in the tobacco used in manufacturing cigarettes shall not exceed 20% on dry weight basis and it shall not produce any materials hazardous to health when burnt with tobacco, It shall conform to the requirements of the Gulf standard mentioned in (2.14).

4.1.4 The requirements mentioned in the following table shall be met in tobacco used in the manufacture of cigarettes:

Requirements to be met in tobacco used in the manufacture of cigarette

| Requirements   | Maximum limit |
|--|---------------|
| - Fine tobacco content passing through a 425 micron sieve (on dry weight basis). | 5%            |
| - Total ash content (on dry weight basis).                                       | 20%           |
| - Moisture content.  | 10 – 16%      |
| - Acid – insoluble ash content (silica) (on dry weight basis).                   | 3%            |
| - Nicotine content (on dry weight basis).  | 3.5%          |
| - Width of tobacco pieces use (minimum).   | 0.1 mm        |
| - Pesticide residues (ppm).  |               |
| DDT  | 1.5           |
| TDE  | 1.0           |
| Toxaphene  | 3.0           |
| Endrin   | 0.1           |
| Aldrin   | 0.1           |
| Formathion   | 0.5           |
| Chlordane  | 0.3           |
| Dialdrin   | 0.1           |
| Heptachlor   | 0.1           |
| Heptachlor epoxide   | 0.1           |
| Dicamba  | 0.5           |
| Permethrin   | 3.0           |
| 2,4 D  | 5.0           |
| 2,4,5 T  | 0.5           |

#### 4.2 Requirements of Cigarettes:

The following requirements shall be met in cigarettes manufactured by mechanical methods:

- 4.2.1 Cigarettes shall be evenly and cleanly cut at right angles to their central axis.
- 4.2.2 The weight of the cigarette wrapping paper shall not exceed 50 gm/m<sup>2</sup> (excluding the weight of the filter and wrapper in case of filter – tipped cigarettes) .
- 4.2.3 The adhesion of the cigarette wrapping paper shall be free from adhesion defects at the adhesion line and also between the filter and the tobacco column.

- 4.2.4 The burning rate of cigarette wrapping paper shall be commensurate with that of the tobacco so as not to have the ember easily separated from the cigarette during burning.
- 4.2.5 The length of tobacco column shall be not less than 60mm for non – filtered cigarette and 50 mm for filter – tipped cigarette.
- 4.2.6 The circumference of the cigarette shall be between 15 – 30mm.
- 4.2.7 Tobacco shall be evenly distributed through the whole length of the cigarette tobacco column without any noticeable voids.
- 4.2.8 The apparent density of the cigarette tobacco shall not be less than  $0.18 \text{ g/cm}^3$  at 13.5% moisture content.
- 4.2.9 The manufacturing tolerances between random sample of cigarettes of the same kind or batch shall not exceed the following:  
Length  $\pm 1.5\%$ , circumference  $\pm 2\%$ , weight of tobacco  $\pm 5\%$ .
- 4.2.10 Loose tobacco from cigarette ends in single packet shall not exceed 0.8% for non-filtered cigarette and 0.4% for filter – tipped cigarettes from the average weight of sample on dry weight basis.
- 4.2.11 The draw resistance of the unlit complete cigarette when tested shall not exceed 160 mm water gauge for filtered cigarette and 110 mm water gauge for non filtered cigarettes, when determined according to Gulf standard mentioned in item (2.8).
- 4.3 Requirements of Cigarette Smoke.  
The following requirements shall be met in cigarettes smoke:
- 4.3.1 The nicotine yield shall not exceed 0.6 mg/cigarette.
- 4.3.2 The tar yield shall not exceed 10.0 mg/cigarette.
- 4.3.3 The carbon monoxide yield shall not exceed 12 mg/cigarette.
- 5. Sampling:**  
Samples shall be drawn according to the Gulf standard mentioned in (2.3).
- 6. Methods of Examination and Testing:**  
Necessary tests shall be carried out on the representative sample taken according to item (5) to ensure conformity of the product to the items of this standard in accordance with the Gulf Standards for methodology mentioned in item (2).
- 7. Packaging:**
- 7.1 Cigarettes shall be packed in suitable packets made from stiff paper or pasteboard, aluminum or tin foils, or any suitable material. These packets shall be lined with foils of paper, tin, plastic or any other material suitable for lining of these packets.
- 7.2 Packets shall be tightly covered with cellophane foils or any other suitable material with a special ribbon fitted in to open the packet when using.
- 7.3 Cigarette packets shall be packed in suitable containers made from paper, stiff paper, or plastics. These containers shall be cover with cellophane foils or other similar materials so as to retain cigarette moisture.

**8. Labeling:**

8.1 The following information shall be legibly and indelibly on the packet with English language:

8.1.1 Trade mark.

8.1.2 Number of cigarette: Not to exceed 20 cigarettes on one packet.

8.1.3 Name of produce or importer.

8.1.4 Packaging date (month – year).

8.1.5 Batch number.

**9. Transportation and storage:**

Cigarettes shall be transported and stored in clean places at room temperature.