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

**Final Draft** 

GSO FDS 1926:2013(E)

اشتراطات تداول مشروبات الطاقة Requirements of handling Energy drinks

إعداد اللجنة الفنية الخليجية لقطاع المواصفات الغذائية والزراعية

هذه الوثيقة مشروع لمواصفة قياسية خليجية تم توزيعها لإبداء الرأي والملحوظات بشأنها، لذلك فإنها عرضة للتغيير والتبديل، ولا يجوز الرجوع إليها كمواصفة قياسية خليجية إلا بعد اعتمادها من مجلس إدارة الهيئة.

# Foreword

GCC Standardization Organization (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 regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No.: 5 "Technical committee for standards of food and agriculture products " " has updated the GSO Standard No. : 1926 " Requirements of handling Energy drinks".

The Draft Standard has been prepared by (United Arab Emirates). This standard has been approved as Gulf Technical Regulation by GSO Board of Directors in its meeting No.../....held on / / / H , / / G The approved standard will replace and supersede the GSO standard No. (GSO 1926/2009).

# **Requirements of handling Energy drinks**

### 1. SCOPE

This gulf Standard applies to the requirements that should be available in the non-alcoholic energy drinks and this does not include athletes/sports drinks.

# 2. COMPLEMENTARY STANDARDS

- 2.1 GSO 9: Labeling of prepackaged foodstuffs.
- 2.2 GSO 21: Hygienic Regulations for Food Plants and their Personnel.
- 2.3 GSO 11: Non-Alcoholic Carbonated Beverages Preliminary Examination and Determination of Total Acidity and Sodium Carbonate Contents.
- 2.4 GSO 12: Non-alcoholic carbonated beverages Determination of carbon dioxide content.
- 2.5 GSO 13: Non-alcoholic carbonated beverages Determination of sulphur dioxide content.
- 2.6 GSO 14: Non-alcoholic carbonated beverages Determination of phosphoric acid content.
- 2.7 GSO 20: Methods for The Determination Of Contaminating Metallic Elements In Foodstuffs.
- 2.8 GSO 1413:"Non-Alcoholic Carbonated Beverages –Methods of Bacteriological Examination".
- 2.9 GSO CAC GL 1: General Guidelines on Claims.
- 2.10 GSO 1016: Microbiological Criteria of Food Product- Part 1.
- 2.11 GSO/CAC 193: General Standard for Contaminants and Toxins in Food and Feed.
- 2.12 GSO 2233: Requirements of nutritional labeling.
- 2.13 Gulf standard which the GSO will be approved concerning with food additives.
- 2.14 GSO 150: Expiration periods at food products.
- 2.15 GSO 1793: The Two Pieces Aluminum Round Cans Used for Canning Food (Beverages & Stuffs)
- 2.16 GSO 1409 :Non-Alcoholic Carbonated Beverages Sampling.
- 2.17 GSO 1931 : Halal Food part 1 General Requirements.
- 2.18 GSO 839 : Food packages part 1 : General requirements.

## **3. DEFENITION**

**Energy Drinks** 

Carbonated or non-carbonated beverages that are typically prepared from water, natural carbohydrates ingredients, stimulant materials such as(caffeine, Taurine, Inositol, Glucuronolactone) or there sources, other substances such as vitamins, minerals, amino acids and permitted food additives, including natural fruits juices or fruits pulps and natural plant extracts may also be added.

#### 4. GENERAL REQUIREMENTS

4.1 All raw materials and food additives used in the manufacture of Energy Drinks shall comply with the relevant gulf standards.

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- 4.2 The product shall be manufactured according to the Gulf standard referenced in item 2.2.
- 4.3 It is not permitted to produce or import these products without prior registration with the relevant authorized government body.
- 4.4 Energy Drinks must be free from prohibited stimulants and hormones.
- 4.5 Carbon dioxide contained in the carbonated Energy Drinks shall be in accordance to good manufacturing practices.
- 4.6 The food additives must comply with the limits mentioned in the gulf standard referenced in item 2.13.
- 4.7 The following additives should adhere to the limits specified below:

Ingredients	level in 100 ml of the product
Caffeine	14.5 - 32 mg
Taurine	400 mg Max.
Inositol	20 mg Max.
Glucuronolactone	240 mg Max.

- 4.8 Energy drinks shall be free from foreign residues, odors of molds, fermentation, insects and their parts and secretions, foreign bodies, and other impurities.
- 4.9 Energy Drink shall comply with the Microbiological criteria of the gulf standard referenced in item 2.10
- 4.10 Energy Drink shall comply with those maximum levels of Contaminants and Toxins as set out in the standard referenced in item 2.11.
- 4.11 Energy Drink shall comply with the Islamic law and with the criteria of the gulf standard referenced in item 2.17.
- 4.12 The product content of plant extracts such as ginseng, ginkgo if used ,shall not exceed the permissible limits allowed internationally.
- 4.13 The ethyl alcohol percent shall not exceed 0.1% in the final product.
- 4.14 The total acidity shall not exceed 0.3% by weight expressed as anhydrous (water-free) citric acid.
- 4.15 The heavy metals shall not exceed the following limits in ppm:

Lead	0.02	
Cadmium	0.01	
Mercury	0.01	
Arsenic (non- organic)	0.1	
Arsenic*	1.0	
*If the total arsenic (organic and non- organic arsenic) exceeds the value listed in the table,		

\*If the total arsenic (organic and non- organic arsenic) exceeds the value listed in the table, check the maximum concentration of the non – organic arsenic.

# 5. PACKAGING, TRANSPORT AND STORAGE

5.1 Energy Drinks shall be packed in suitable containers to safeguard the hygienic quality of the product. Containers have to be dry, free from defects and provided with a tight seal so as to preserve the integrity and quality of the product and to protect the product against any potential spoilage an or contamination. All packaging components shall comply to the standard referenced in item 2.15 and item 2.18.

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- 5.2 Energy Drinks should be stored away from moisture, direct sunlight and any potential sources of contaminates and undesired odors.
- 5.3 Transport of these products shall be by suitable and clean vehicles, which would preserve the quality and feel of the product and its packaging .

#### 6. SAMPLING

Samples shall be taken according to GSO standard mentioned in item (2.16).

### 7. METHODS OF TESTING

- 7.1 Analytical testing of the product must be in accordance to the standards referenced in items 2.3 and 2.8.
- 7.2 All other tests shall be performed on a representative sample , that is taken in accordance with clause 6, to ensure the product matches with the terms of this standard.

# 8. LABELING

Without prejudice to what is stated in the standards referenced in items 2.1 and 2.9, the following specific provisions shall be declared on the label in Arabic and may be written in any other language besides basic Arabic language:

- 8.1 The following cautionary statement should be added on label: "not suitable for pregnant or lactating women, persons under 16years persons with sensitivity to such products, or those who suffer from diseases that may affect their health especially heart patients, arteries, diabetics, and athletes during exercise".
- 8.2 To mention the allowed safe limit of consumption per day, and the legal responsibility of the manufacturer.
- 8.3 For products that exceed caffeine levels of 150 mg/L an additional cautionary statement "High Caffeine Content" shall be included on the label.
- 8.4 The label shall include the product nutrition information as to what is stated in the standards referenced in items 2.12.
- 8.5 The product shall be displayed on separate shelves or within individual refrigerators in retail shops that sell directly to consumers ,and top warnings contained in this standard should be written in a clear, legible and prominent text preceded by the words "warning".
- 8.6 Expiration period according to what is stipulated in the Gulf standard mentioned in item (2.14).