

# STANDARDIZATION ORGANIZATION FOR G.C.C (GSO)

نهائي: مشروع

**GSO 5/FDS..... /2008**

بذور فول الصويا  
**SOYBEANS**

إعداد

الغذائية والزراعية اللجنة الفنية الخليجية لقطاع مواصفات المنتجات

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

## 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 " The Gulf Technical Committee for Food and Agricultural Standards Products" has prepared this Standard . The Draft Standard has been prepared by (**KINGDOM OF SAUDI ARABIA** )

The draft Standard has been prepared based on relevant ADMO, International and National foreign Standards and references.

This standard has been approved as Gulf (Standard / Technical Regulation) by GSO Board of Directors in its meeting No.../.... .....held on / / / H , / / G

## **SOYBEANS**

**Date of GSO Board of Directors' Approval**       :  
**Issuing Status**   :

## SOYBEANS

### 1. SCOPE AND FIELD OF APPLICATION

This standard applies to soybeans for direct human consumption.

### 2. COMPLEMENTARY REFERENCES

- 2.1 GSO 9 “Labelling of Prepackaged Foods”.
- 2.2 GSO 21 “Hygienic Regulations for Food Plants and Their Personnel”.
- 2.3 GSO 245 “Cereals – Sampling (as grains)”.
- 2.4 GSO 382 “Maximum Limits for Pesticide Residues in Agricultural and Food Products –Part 1”.
- 2.5 GSO 383 “Maximum Limits for Pesticides Residue in Agricultural and Food Products –Part 2”.
- 2.6 GSO 168 “Conditions of Storage Facilities for Dry and Canned Foodstuffs”.
- 2.7 GSO 139 “Packages of Food Products – Part 1 — General Requirements”.
- 2.8 GSO 841 “Maximum Limits of mycotoxins Permitted in Foods and Animal Feeds – Aflatoxins”.
- 2.9 GSO 988 “Limits of Radiation Levels Permitted in Foodstuffs”.
- 2.10 GSO 1016 “Permissible Microbiological Limits in Foodstuffs”.
- 2.11 Gulf standards which shall be approved by the Organization concerning the following:
  - 2.11.1 Permissible Maximum Limits of Heavy Metals in Foodstuffs”.
  - 2.11.2 Methods of Test for Legumes.
  - 2.11.3 “Food Packages – Part II, Plastic Packages, General Regulations”.

### 3. DEFINITIONS

- 3.1 Soybeans  
Grain that consists of 50% or more of whole or broken soybeans (Glycine max. (L.) Merr.) that will not pass through an 0.32 cm round-hole metal sieve and not more than 10.0% of other grains.
- 3.2 **Splits**  
Soybeans with more than  $\frac{1}{4}$  of the bean removed and that are not damaged.

**3.3 Damaged kernels**

Soybeans and pieces of soybeans that are discolored and badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect – bored, mold-damaged, sprout-damaged.

**3.4 Heat-damaged kernels**

Soybeans and pieces of soybeans that are materially discolored and damaged by heat.

**3.5 Foreign material**

All matter that passes through an 0.32 cm round-hole metal sieve and all matter other than soybeans remaining in the sieved sample.

**3.6 Animal filth**

All matter that are from animal source such as dead insects or their parts and excreta of birds, rodents and insects, etc.

**4. CLASSIFICATION**

Beans are classified according to colour to two classes:

**4.1 Yellow soybeans**

Soybeans that have yellow or green seed coats and which, in cross section, are yellow or have a yellow tinge, and may include not more than 10.0% of soybeans of other colours.

**4.2 Mixed soybeans**

Soybeans that do not meet the requirements of the class yellow soybeans.

**5. REQUIREMENTS**

The following requirements shall be met in grains:

5.1 It shall be sound and clean.

5.2 It shall not have rancid or abnormal odour or tests.

5.3 It shall be free from colouring additives.

5.4 It shall be free from fungus growth and live insects or any form from their life cycle.

5.5 It shall be processed according to GSO mentioned in 2.2.

5.6 It shall not exceed the limits of pesticide residues prescribed in GSO mentioned in 2.4 and 2.5.

5.7 It shall not exceed the limits of fungal toxins prescribed in GSO mentioned in 2.8.

5.8 It shall not exceed the microbiological limits prescribed in GSO mentioned in 2.10.

- 5.9 It shall not exceed the limits of heavy metals prescribed in GSO mentioned in 2.11.1
- 5.10 It shall not exceed the limits of radiation prescribed in GSO mentioned in 2.9.
- 5.11 It shall meet the grade and class requirements prescribed in 4 and 6 respectively.
- 5.12 It shall be free from harmful or toxic substances.
- 5.13 It shall not contain more than 5 green or dry garlic bulbets in a 1 kg portion.

## 6. GRADING

Soybeans are graded according to grades in Table (1). If beans are not graded, grade requirements shall meet the requirements of grade 1.

**Table (1)**  
**Grades and grade requirements for soybeans**

Grading factors	Grades Nos		
	1	2	3
Minimum test weight (Kg/Hectolitre)	70	67	65
Maximum % limits of:			
Heat damaged kernels (part of total)	0.2	0.5	1.0
Total damaged kernels	2.0	3.0	5.0
Splits	10.0	20.0	30.0
Soybeans of other colours (yellow beans only)	1.0	2.0	5.0
Stones	0.1	0.1	0.1
Total foreign material	1.0	2.0	3.0
Maximum count limits of the following foreign material:			
Animal filth	9	9	9
Castor beans	1	1	1
Crotalaria seeds	2	2	2
Glass	0	0	0
Stones	3	3	3
Unknown foreign substance	3	3	3
Total	10	10	10

## 7. SAMPLING

Samples shall be taken as prescribed in GSO mentioned in 2.3.

**8. METHODS OF TEST**

Samples taken in accordance with item 7 are tested according to GSO mentioned in 2.11.2.

**9 PACKAGING**

Without prejudice to the provisions of the standards prescribed in items 2.7 and 2.11.3, beans shall be packaged in suitable containers which will safeguard the hygienic, and nutritional qualities of the product.

**10. TRANSPIRATION**

Beans shall be transported in such a way as to safeguard the hygienic and nutritional qualities of the product.

**11. STORAGE**

Without prejudice to the provisions of the standard prescribed in 2.6, beans shall be stored in such a way as to safeguard the hygienic and nutritional qualities of the product.

**12. LABELLING**

Without prejudice to the provisions of the standard prescribed in 2.1, the following shall be declared on the package:

- 12.1 The name and colour of product.
- 12.2 Grade.
- 12.3 Country of origin.
- 12.4 The date of harvest (year).
- 12.5 Expiry date (day-month-year)