

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

مشروع : نهائي

GSO 5/FDS/336:2009 (E)

جبين الشدر
Cheddar cheese

إعداد
اللجنة الفنية الخليجية لقطاع المنتجات الغذائية والزراعية

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.

رقم التصنيف الدولي: 67.100.30

Cheddar cheese

جبين الشدر

Date of approval:
Legal status:

تاريخ الاعتماد:
صفة الإصدار:

تقديم

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية هيئة إقليمية تضم في عضويتها الأجهزة الوطنية للمواصفات والمقاييس في دول الخليج العربية ، ومن مهام الهيئة إعداد المواصفات القياسية الخليجية بواسطة لجان فنية متخصصة .

وقد قامت هيئة التقييس لدول مجلس التعاون لدول الخليج العربية ضمن برنامج عمل اللجنة الفنية رقم 5 "اللجنة الفنية الخليجية لقطاع مواصفات المنتجات الغذائية والزراعية" بتحديث المواصفة القياسية الخليجية رقم 1994/336 "جبين الشدر". وقامت (مملكة البحرين) بإعداد مشروع هذه المواصفة.

وقد اعتمدت هذه المواصفة كمواصفة (قياسية / لائحة فنية) خليجية وذلك في اجتماع مجلس إدارة الهيئة رقم () ، الذي عقد بتاريخ / / هـ ، الموافق / / م .

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: " Gulf technical committee for Food & Agricultural standards " has updated Gulf Standard No. : 336/1994 "Cheddar cheese". The Draft Standard has been prepared by (Kingdom of Bahrain)

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

Cheddar cheese

1 Scope:

This standard applies to cheddar intended for direct consumption or for further processing in conformity with description in section 3 of this standard.

2 Complimentary references:

- 2/1 GSO 9 “Labeling of prepackaged foodstuffs”
- 2/2 GSO 21 “Hygienic regulations for food plants and their personnel”
- 2/3 GSO 150 “Expiration Periods of Food Products”
- 2/4 GSO 168 “Requirements of storage facilities for dry and canned foodstuffs”
- 2/5 GSO 171 “Methods for the Chemical Analysis of Cheese”
- 2/6 GSO 179 “Methods of Microbiological Examination of Cheese”
- 2/7 GSO 323 “General requirements for transportation and storage of chilled and frozen foods”
- 2/8 GSO 382 “Maximum limits of pesticide residues in agricultural and food products – Part 1”
- 2/9 GSO 569 “Methods of Sampling Milk and Milk Products”
- 2/10 GSO 839 “Food packages – Part 1: General requirements”
- 2/11 GSO 988 “Limits of radioactivity levels permitted in foodstuffs – Part 1”
- 2/12 GSO 998 “Method for detection of permissible radionuclides limits in food”
- 2/13 GSO 1016 “Microbiological Criteria of Food Products – Part 1”
- 2/14 GSO “General standard for cheese”¹

3 Definitions:

Cheddar cheese: Cheddar is a ripened hard cheese in conformity with GSO standard mentioned in 2/14. The body has a near white or ivory through to light yellow or orange colour and a firm-textured (when pressed by thumb), smooth and waxy texture. Gas holes are absent, but a few openings and splits are acceptable. The cheese is manufactured and sold with or without rind which may be coated.

¹ Will be approved by GSO in the future.

For Cheddar ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 5 weeks at 7–15 °C depending on the extent of maturity required. Alternative ripening conditions (including the addition of ripening enhancing enzymes) may be used, provided the cheese exhibits similar physical, biochemical and sensory properties as those achieved by the previously stated ripening procedure.

4 Requirements:

The following requirements shall be met in cheddar cheese:

4/1 The product shall be completely free from pig products or their derivatives.

4/2 Appearance shall be smooth. The product may be coated with wax or plastic and shall be free from the defects of waxing.

4/3 Texture shall be firm, with a few mechanical openings and gas holes shall be absent.

4/4 The product shall be processed in hygienic conditions in accordance with GSO standard mentioned in 2/2.

4/5 The substances used in its manufacturing shall comply with the relevant GSO standards.

4/6 Its colour shall be uniform and range from near white or ivory through to light yellow or orange colour.

4/7 The product shall be free from fats except milk fat.

4/8 The following substances may be added during cheese making:

4/8/1 Starter cultures of harmless lactic acid and/or flavour producing bacteria and cultures of other harmless microorganisms.

4/8/2 Rennet or other safe and suitable coagulating enzymes.

4/8/3 Sodium chloride and potassium chloride as a salt substitute.

4/8/4 Potable water.

4/8/5 Safe and suitable enzymes to enhance the ripening process.

4/8/6 Safe and suitable processing aids.

4/8/7 Rice, corn and potato flours and starches: Notwithstanding the provisions in GSO standard mentioned in 2/14, these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in 4/13.

4/9 The pesticide residual level in cheddar cheese shall comply with GSO standard mentioned in 2/8.

4/10 The microbiological criteria of micro-organisms in cheddar cheese shall comply with GSO standard mentioned in 2.13.

4/11 The radioactivity levels in cheddar cheese shall comply with GSO standard mentioned in 2.11.

4/12 The product composition shall be as follows:

Milk constituent	Minimum content (m/m)	Maximum content (m/m)	Reference level (m/m)
Milkfat in dry matter:	22%	Not restricted	48% to 60%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	Fat in dry matter content (m/m)	Corresponding minimum dry matter content (m/m)	
	Equal to or above 22% but less than 30%	49%	
	Equal to or above 30% but less than 40%	53%	
	Equal to or above 40% but less than 48%	57%	
	Equal to or above 48% but less than 60%	61%	
	Equal to or above 60%	66%	

4/13 Only those additives are used within the functions and limits specified.

Additive functional class:	Justified use	
	Cheese mass	Surface/rind treatment
Colours:	X ²	-
Bleaching agents:	-	-
Acids:	-	-
Acidity regulators:	X	-
Stabilizers:	-	-
Thickeners:	-	-
Emulsifiers:	-	-
Antioxidants:	-	-
Preservatives:	X	X
Foaming agents:	-	-
Anti-caking agents:	-	X ³

X = The use of additives belonging to the class is technologically justified.

- = The use of additives belonging to the class is not technologically justified.

INS no.	Name of additive	Maximum level
Colours		
101(i)	Riboflavin	300 mg/kg
140	Chlorophyll	Limited by GMP
160a(i)	beta-Carotene (synthetic)	35 mg/kg Singly or in combination
160a(iii)	beta-Carotene (<i>Blakeslea trispora</i>)	
160e	beta-apo-8'-Carotenal	
160f	beta-apo-8'-Carotenoic acid, methyl or ethyl ester	
160a(ii)	beta-Carotenes, vegetable	600 mg/kg
160b(ii)	Annatto extracts – norbixin-based	25 mg/kg

2 Only to obtain the colour characteristics, as described in Section 3.

3 For the surface of sliced, cut, shredded or grated cheese, only.

Preservatives		
1105	Lysozyme	Limited by GMP
200	Sorbic acid	1 000 mg/kg based on sorbic acid. Surface Treatment only
201	Sodium sorbate	
202	Potassium sorbate	
203	Calcium sorbate	
234	Nisin	12.5 mg/kg
235	Pimaricin (Natamycin)	2 mg/dm ² Not present at a depth of 5 mm. Surface Treatment only
251	Sodium nitrate	37 mg/kg Singly or in combination (expressed as nitrate ion)
252	Potassium nitrate	
280	Propionic acid	3 000 mg/kg Surface Treatment only
281	Sodium propionate	
282	Potassium propionate	
Acidity regulators		
170(i)	Calcium carbonate	Limited by GMP
504 (i)	Magnesium carbonate	Limited by GMP
575	Glucono delta-lactone	Limited by GMP
Anticaking agents		
460(i)	Microcrystalline cellulose	Limited by GMP
460(ii)	Powdered cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 000 mg/kg Singly or in combination Silicates calculated as silicon dioxide
552	Calcium silicate	
553(i)	Magnesium silicate	
553(iii)	Talc	
554	Sodium aluminosilicate	
556	Calcium aluminium silicate	
559	Aluminium silicate	

5 Sampling:

Samples for testing shall be drawn according to GSO standard mentioned in 2/9.

6 Methods of test:

The samples shall be analysed by the methods of analysis as specified in 2/5, 2/6, 2/12.

7 Packaging:

The following shall be observed in packaging:

- 7/1 Materials used for wrapping or packaging the cheese shall not affect consumer's health or impart any contamination to the product.
- 7/2 The packages shall be clean and tightly closed by automatic wrapping under vacuum or with gas flushing.
- 7/3 The product packaging shall be according to GSO standard mentioned in 2/10.

8 Marking:

Without prejudice to what is stated in the Gulf standard mentioned in 2/1 and 2/3, the following shall be included in the label:

- 8/1 Name of the product.
- 8/2 Milkfat percentage.
- 8/3 Trade name or brand name.
- 8/4 Name and address of the manufacturer or packer.
- 8/5 Batch number.
- 8/6 Net mass.
- 8/7 Producing country.
- 8/8 Food additives used.
- 8/9 Production and expiration dates.

9 Transport and storage:

The following shall be observed in transportation and storage:

- 9/1 The product shall be transported in clean and dry transportation medium and has not been used in transporting poisonous or toxic matter in accordance to GSO standard mentioned in 2/7.
- 9/2 The product shall be stored in stores with good ventilation, away from high-temperature sources, humidity and insects.

9/3 The store shall be according to GSO standard mentioned in 2/7.

Reference:

GSO 336/1994 “Cheddar cheese”

CODEX Stan 263-1966, Rev. 2007, Amd. 2008 “Codex standard for cheddar”