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

مشروع: نهائي

GSO /FDS 1304/2014(E)

مساحيق الكاكاو والمخاليط الجافة من الكاكاو والسكر Cocoa powders (cocoas) and dry mixtures of cocoa and sugars

**ICS**: 67.140.30

## **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 Technical regulation No. : GSO 1304/2012 " Cocoa powders (cocoas) and dry mixtures of cocoa and sugars" The Draft Technical regulation has been prepared by the State of Qatar .

This Technical regulation has been approved by GSO Board of Directors in its meeting No.(15), held on (), The approved standard will replace and supersede the standard No. (GSO 1304/2012).

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## Cocoa powders (cocoas) and dry mixtures of cocoa and sugars

#### 1. SCOPE

This gulf standard applies to cocoa powders (cocoas) and dry mixtures of cocoa and sugars intended for direct consumption.

## 2. COMPLEMENTARY STANDARDS

- 2.1 GSO 9 "Labeling of prepackaged foodstuffs".
- 2.2 GSO 20 " Methods for the determination of contaminating metallic elements in foodstuffs".
- 2.3 GSO 21 "Hygienic regulations in food plants and their personnel".
- 2.4 GSO 168 "Requirements of storage facilities for dry and canned foodstuffs".
- 2.5 GSO CAC 193 " General Standard for contaminants & toxins in food".
- 2.6 GSO 382 "Maximum limits for pesticide residues in agriculural food products Part 1".
- 2.7 GSO 383 "Maximum limits for pesticide residues in agriculural food products Part 2".
- 2.8 GSO 839 "Food packages part 1: general requirements".
- 2.9 GSO 988 "Limits of radionativity levels permitted in foods stuff part 1".
- 2.10 GSO 998 " Method for detection of permissible radionuclides limits in food part 1: gamma spectrometry analysis a cs 134, cs 137".
- 2.11 GSO 1016 "Microbiological criteria for food stuffs Part 1".
- 2.12 GSO 1303 "Methods of test for cocoa".
- 2.13 GSO 1694 "General principles of food hygiene".
- 2.14 Gulf Standards adopted by the commission:
- 2.14.1 "Detection of pork fat in food products".
- 2.14.2 "Determination of Pesticide Residues in Food Products".

## 3. DESCRIPTION

- 3.1 COCOA PRODUCTS
- 3.1.1 "Cocoa Powder" and "Fat-reduced Cocoa Powder" and "Highly Fat-reduced Cocoa Powder" are the products obtained from cocoa cake (Cacao) Mass (Cocoa/Chocolate Liquor) and Cocoa Cake) transformed into powder.

## 4. **REQUIREMENTS:**

- 4.1 ESSENTIAL COMPOSITION AND QUALITY FACTORS
- 4.1.1 ESSENTIAL COMPOSITION

## 4.1.1.1 Moisture Content

Not more than 7% m/m

## 4.1.1.2 Cocoa Powder and Dry Mixtures of Cocoa and Sugars

		COCOA BUTTER CONTENT (as a minimum cocoa powder content on a dry matter basis)		
		≥ 20% m/m	≥ 10% m/m but < 20% m/m	< 10% m/m
COCOA POWDERS ONLY		Cocoa Powder	Fat-Reduced Cocoa Powder	Highly Fat reduced Cocoa Powder
NI IN	Not < 25% m/m	Sweetened Cocoa,	Sweetened Cocoa, Fat- reduced,	Sweetened Cocoa, Highly Fat-reduced
OCOA POWDER CONTENT DRY MIXTURES		or Sweetened Cocoa Powder,	or Sweetened Cocoa Powder, Fat-reduced,	or Sweetened Cocoa Powder, Highly Fat-reduced
COCOA POW DRY		<u>or</u> Drinking Chocolate	or Fat-Reduced Drinking Chocolate	or Highly Fat- Reduced Drinking Chocolate

Not < 20% m/m	Sweetened Cocoa Mix,	Sweetened Cocoa Mix, Fat-reduced,	Sweetened Cocoa Mix, Highly Fat- reduced
	<u>or</u>	<u>or</u>	<u>or</u>
	Sweetened Mixture with Cocoa	Sweetened Mixture with Cocoa, Fat-reduced:	Sweetened Mixture with Cocoa, Highly Fat-reduced
< 20% m/m	Sweetened Cocoa-	Sweetened Cocoa-	Sweetened Cocoa-
	flavoured Mix	flavoured Mix, Fat- reduced	flavoured Mix, Highly Fat-reduced

## 4.1.1.3 Chocolate Powder

Chocolate Powder: mixture of cocoa powder and sugars and/or sweeteners, containing not less than 32% m/m cocoa powder (29% m/m on a dry matter basis).

## 4.2 OPTIONAL INGREDIENTS

Spices

Salt (Sodium chloride)

# 4. 3 FOOD ADDITIVES

# 4.3.1 ACIDITY REGULATORS

FOOD ADDITIVE	MAXIMUM LEVEL
503(i) Ammonium carbonate	
503(ii) Ammonium hydrogen carbonate	
527 Ammonium hydroxide	
170(i) Calcium carbonate	
330 Citric acid	
504(i) Magnesium carbonate	
o vi(i) Magnesiam eurosmate	Limited by GMP on the finished
528 Magnesium hydroxide	product/final cocoa product
530 Magnesium Oxide	
501(i) Potassium carbonate	
501(ii) Potassium hydrogen carbonate	

525 Potassium hydroxide	Limited by GMP on the finished
500(i) Sodium carbonate	product/final cocoa product
500(ii) Sodium hydrogen carbonate	
524 Sodium hydroxide	
526 Calcium hydroxide	
338 Orthophosphoric acid	2.5 g/kg, expressed as P <sub>2</sub> O <sub>5</sub> , on
	the cocoa fraction of the finished
	product
334 L-Tartaric acid	5 g/kg on the cocoa fraction of
	the finished product

# 4.3.2 EMULSIFIERS

	MAXIMUM LEVEL
471 Mono- and di-glycerides of edible	Limited by GMP on the finished

fatty acids	product/final cocoa product
322 Lecithin	
476 Polyglycerol esters of interesterified ricinoleic acid	5 g/kg on the finished product/final cocoa product
442 Ammonium salts of phosphatidic acids	10 g/kg on the finished product/final cocoa product
473 Edible sucrose esters of fatty acids	10 g/kg on the finished product/final cocoa product
491 Sorbitan Monostearate	2 g/kg in combination in finished
492 Sorbitan Tristearate	product/final cocoa product
493 Sorbitan Monolaurate	
494 Sorbitan Monooleate	
495 Sorbitan Monopalmitate	
477 Propylene Glycol Esters of Fatty	5 g/kg in finished product/final cocoa
Acids	product
475 Polyglycerol Esters of Fatty Acids	5 g/kg in finished product/final cocoa product
412 Guar Gum	Limited by GMP in finished product/final
418 Gellan Gum	cocoa product
466 Sodium Carboxymethyl Cellulose	

# 4.3.3 STABILIZERS

	MAXIMUM LEVEL
400 Alginic Acid	
407 Carrageenan and its Na, K, NH <sub>4</sub> salts(includes furcellaran)	
410 Carob Bean Gum, Locust Bean Gum	
413 Tragacanth Gum	Limited by GMP in finished product/final
414 Gum Arabic, Arabic Gum, Acacia	cocoa product
Gum	
415 Xanthan Gum	
416 Karaya Gum	
417 Tara Gum	
460 Cellulose	

# 4.3.4 FLAVOURING AGENTS

	MAXIMUM LEVEL
Natural and artificial flavours, except those which reproduce the flavour of chocolate or milk	Limited by GMP in finished product/final cocoa product

Vanillin	Limited by GMP in finished product/final cocoa product
Ethyl vanillin	-

## 4.3.5 ANTI-CAKING AGENTS

	MAXIMUM LEVEL
559 Aluminium silicate	
552 Calcium silicate	
553(i) Magnesium silicate	
553(ii) Magnesium trisilicate	10 g/kg on the finished product/final
553(iii) Talc	cocoa product
554 Sodium aluminosilicate	
551 Silicon dioxide, amorphous	
341(iii) Tricalcium phosphate	

# 4.3.6 BULKING AGENT

	MAXIMUM LEVEL
1200 Polydextroses A and N	Limited by GMP in finished product/final cocoa product

# 4.3.7 SWEETENERS

	MAXIMUM LEVEL
953 Isomalt (Isomaltitol)	
966 Lactitol	Limited by GMP on the finished
421 Mannitol	product/final cocoa product
965 Maltitol and maltitol syrup	
420 Sorbitol and sorbitol syrup	
967 Xylitol	
950 Acesulfame Potassium	350 mg/kg on finished product/final cocoa product
951 Aspartame	3 g/kg on finished product/final cocoa product
955 Sucralose	580 mg/kg on finished product/final cocoa product
954 Saccharin (and Na, K, Ca salts)	100 mg/kg: residue limit on finished product/final cocoa product
957 Thaumatin	Limited by GMP on finished product/final cocoa product

#### 4.3.8 THICKENER

## 4.3.8.1 Modified Starches

	MAXIMUM LEVEL
1400 Dextrins, Roasted Starch White	
And Yellow	
1401 Acid-Treated Starch	
1402 Alkaline Treated Starch	Limited by GMP in finished product/final
1403 Bleached Starch	cocoa product
1404 Oxidized Starch	
1405 Starches, Enzyme-treated	

## 4.4 HYGIENE

- 4.4.1 The products covered by the provisions of this standard shall be prepared and handled in accordance with the appropriate sections of the Gulf standard mentioned in item (2.3).
- 4.4.2 The maximum limits of contaminants and toxins should be according to the gulf standard mentioned in item (2.5).
- 4.4.3 The maximum limits of pesticide residues in agricultural food products should be according to the gulf standard mentioned in item (2.6), (2.7).
- 4.4.4 The maximum limits of radioactivity should be according to the gulf standard mentioned in item (2.9).

## 5. METHODS OF ANALYSIS AND SAMPLING:

Should be according to the gulf standards mentioned in items (2.2), (2.10),(2.12).

#### 6. PACKAGING:

Containers used in food packaging should be according to the gulf standard mentioned in item (2.8).

## 7. STORAGE:

Containers must be stored in stores with well ventilated away from direct sunlight and sources of heat and contamination stores and be identical to the requirements contained in the Gulf standard mentioned in item (2.4)

## 8. LABELLING

Without prejudice to what has been mentioned in the Gulf standard in item (2.1), the following shall be declared on each container:

#### 8.1 NAME OF THE FOOD

7.1.1 Cocoa Powders and Dry Mixtures of Cocoa and Sugars

The descriptions of the products defined in Section 4.1.2 shall be used as the name of the food in each case.

- 8.1.2 Chocolate powder
- 8.1.2.1. The name of the product complying with Section 4.1.3 of the standard shall be: "Chocolate Powder"
- 8.1.2.2. The words "minimum cocoa powder (or fat-reduced cocoa powder or highly fat-reduced cocoa powder) content x%" shall be declared in accordance with the Gulf standard in item (2.1).
- 8.1.3 Sweeteners
- 8.1.3.1. When sweeteners described in section 5.7 have been used to replace sugars, totally or partially, the word "sugared", or equivalent, shall not appear in the name of the food: according to the language of the importing country, the term "sweetened" or equivalent shall be used.
- 8.1.3.2. Where sweeteners have been added to the product, the term "artificially sweetened" or "with added sweeteners" or "with sugars and added sweeteners" shall appear in close proximity to the name of the food.
- 8.1.4 National laws should only permit the use of names other than those given in 7.1.1 and 7.1.2. in countries where such names are traditional, fully understood by the consumer and not misleading or deceptive with respect to other categories of product provided that any product with less than 25% of total cocoa powder or fatreduced cocoa powder content shall not bear the term "chocolate" in its designation.

## 8.2 LABELLING OF NON-RETAIL CONTAINERS

8.2.1 Information required in Section 7.1 of this Standard and the Gulf standard in item (2.1), shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor and/or importer shall appear on the container.

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8.2.2 However, lot identification, and the name and address of the manufacturer, packer, distributor and/or importer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.