

**KINGDOM OF CAMBODIA
NATION RELIGION KING**

Ministry of Industry, Mines and Energy

N° 530

Phnom Penh, 20 July 2005

**PRAKAS
ON
INDUSTRIAL STANDARD OF CAMBODIA CS 0051:2005
" CHILI SAUCE "**

MINISTRY OF INDUSTRY, MINES AND ENERGY

- Having seen the Constitution of the Kingdom of Cambodia
- Having seen the Royal Decree N° 1198 / 72 dated 30 November 1998 on the appointment of the Royal Government of the Kingdom of Cambodia.
Having seen the Royal Cram N° 0196 / 05 dated 24 January 1999 on establishment of the Ministry of Industry, Mines and Energy.
- Having seen the Royal Cram N° 0600 / 001 dated 21 June 2000 noticed for using the Law on quality and safety of products, goods and services.
- Having seen the Sub-Decree N° 42 dated 15 May 2001 on Industrial Standard of Cambodia
Having seen the Notices No 175 dated 02 February 2004 on drafted standard for Chili Sauce
- Referred to the record of industrial standard technical committee on 9th time on the consultation and discussion meeting on 13 October 2003 on drafted standard CS X009:2003 for Chili Sauce
- Letter No.563 MOC/M2005 dated 06 April 2005 of Codex Committee for approving on drafted standard CS X009:2003 for Chili Sauce
Referred to the current situation.

DECIDES

Article 1: To establish the industrial standard of Cambodia **CS0051-2003** for Chili sauce as compulsory standard to determine the requirements of raw material, food additive, poison substances, packaged material, packaging, labeling, marking, sampling, evaluation of conformity and conducting test of the Chili sauce produced in the country and imported from foreign countries for use in Kingdom of Cambodia as given in appendix here with.

Article 2: Companies, factories, enterprises and handicrafts produced or imported Chili sauce for distributing or marketing in the Kingdom of Cambodia shall comply with the above compulsory standards and use industrial standards mark of Cambodia printing or sticking on the product after obtaining standards license from Ministry of Industry, Mine and Energy.

Article 3: All previous regulations, which are inconsistent with this Prakas, shall be considered null and void.

Article 4: This Prakas shall come into effect from 01 October 2005.

MINISTER

Minister of Industry, Mines and Energy

Signed and Sealed: **SUY SEM**

Cc:

Council of Minister
Cabinet of Samdech Prime Minister
(For information)
Ministry of Interior
Ministry of Economy and Finance
Ministry of Commerce
Ministry of Health
Ministry of Agriculture, Forestry and Fishery
Ministry of Information
Ministry of Youth Education and Sports
Ministry of Women Affairs and
Ministry of Justice
Municipal Chamber
Municipal and Provincial Halls
All industrial offices in the provinces and municipalities.
(For implementation)
Achieves

Cambodian Standards 051:2005

CS 051:2005 Chilli Sauce

The Member of Industrial Standards Technical Committees

Based on the principle of consensus, the following Industrial Standards Technical Committees are participated in the meeting for discussion and preparing the standard with the leading by the representative of Ministry of Industry, Mines and Energy.

Chairperson

H.E. Hul Lim Under Secretary of State of the Ministry of Industry, Mines and Energy

Members

Mr. Ping Sivlay	Director of the Department of Industrial standards of Cambodia
Mr. Sok Sichan	Representative of the Ministry of Construction...
Mr. Eang Ponna	Representative of the Ministry of Commerce
Mr. Heng Hout	Representative of the Ministry of Health
Mr. Pov Lathy	Representative of the Public Work and Transport
Mr. Soy SoMethea	Representative of the Ministry of Agriculture, Forestry and Fishery
Mr. Chea Hak	Representative of the Department of Custom...
Mrs. Srey Monirath	Representative of the Royal Academy
Mr. Lor Lito	Representative of the Royal University of Agriculture
Mr. Long lay	Representative of the Royal University of Phnom Penh
Mrs. Tea Channy	Representative of the Institute of Technology of Cambodia
Mr. Oung Channy	Representative of the University of Scientific Health
Mr. Sok Sotheavy	Representative of the Chamber of Commerce
Mr. Heng Heang	Representative of the Phnom Penh Small Industry and Enterprise
Mrs. Lay Navin	Representative of the Department of Industrial Techniques
Mrs. Yos Tithida	Representative of the Department of Industrial Techniques
Mr. Hot Pheng	Representative of the Phnom Penh Department of Industrial Affair, Mines and Energy

Secretariats

Staff of the Department of Industrial Standards of Cambodia

Cambodian Standards 051:2005

CS 051:2005 Chilli Sauce

Foreword

This Cambodian standard was prepared by the Department of Industrial Standards of Cambodia and has been given the authorization for adoption and publication by the Industrial Standards Technical Committee on 11 November 2003; and declared in the ministerial regulation NO. 530 រក្សាស្របច្បាប់ dated 20 July 2005 as Cambodia Standard by the minister of the Ministry of Industry, Mines and Energy.

During preparation of this standard, the standard has been discussed based on the provisions stipulated in the Sub-decree NO. 42 អនក្រឹត្យ, dated 15 May 2001 on Industrial Standards of Cambodia. All specific requirements prescribed in this standard are to apply only for determining the characteristic of chillies sauce.

The product made from chilli mixed with garlic, sugar, vinegar, salt, to which may be added vegetables fruits and spices.

In the preparation of this standard, valuable assistance derived from the publication of the Thai Industrial Standards institute and SPRING Singapore, are gratefully acknowledged.

References:

TIS 242:2533 (1990) – chili sauce
SS 340:1990 - Specification for chili sauce

Cambodian Standards 051:2005

CS 051:2005 Chilli Sauce

1- Scope

This standard prescribes types ingredients, requirements, food additives, contaminants, hygiene, containers and packaging, marking and labeling, sampling and criteria for conformity, inspection and analysis of chilli sauce.

2- Definitions

For the purpose of this standard, the following definitions shall apply:

- 2-1 Chilli sauce: The product made from chilli mixed with garlic, sugar, vinegar, salt, to which may be added vegetables fruits and spices.
- 2-2 Chillies: The fresh, mature and clean chillies of Capsicum and/or preserved chillies.
- 2-3 Pure chilli sauce: The chilli sauce made only from chillies and food additives such as sugar and vinegar.
- 2-4 Mixed chilli sauce: The chilli sauce product to which is added vegetable or fruit, for example tomatoes, papaya or pumpkins, individually or in combination.

3- Types

Chili sauce shall be of 2 types:

- 3-1 Pure chilli sauce
- 3-2 Mixed chilli sauce

4- Ingredients

- 4-1 Chillies
- 4-2 Vegetables and fruits (Only for mixed chilli sauce)
- 4-3 Sugar
- 4-4 Vinegar
- 4-5 Salt
- 4-6 Garlic
- 4-7 Optional ingredients such as spices and onion.

5- Requirements

5-1 General characteristics

5-1-1 Pure chilli sauce shall be prepared only from chillies and other ingredients specified in clause 4, except vegetables and fruits. Compliance is checked by visual inspection or with an aid of a microscope if necessary.

5-1-2 Mixed chilli sauce shall have chillies as ingredient and contain no ingredient other than those specified in clause 4.

5-2 Color, texture, freedom from defects, flavor and consistency

5-2-1 Color

Chili sauce of each type shall be of bright natural color characteristic of the ingredients used.

5-2-2 Texture

Chilli sauce of each type shall be of uniformly fine texture when inspected with

the naked eyes.

5-2-3 Freedom from defects

In both types of chilli sauce, defects such as black spots, black fragments or seeds of chilli are accepted except when they are in amount that the color of the product is not altered.

5-2-4 Flavor

Chilli sauce of each type shall be of pleasant flavor characteristic of the ingredients used, without the burnt or other objectionable smell.

5-2-5 Consistency

5-2-5-1 Pure chilli sauce shall be of good consistency such that when transferred into a plane surface container, the surface of the chilli sauce shall be even and the chilli homogeneous without separation of clear liquid portion.

5-2-5-2 Mixed chili sauce shall be of good consistency such that when transferred into a plane surface container, the surface of the chilli sauce shall be even and the chilli sauce homogeneous.

When assessed by score rating as in clause 12.1, each individual item shall obtain score of not less than 14 and the average total score shall be not less than 80.

6- Food additives

6-1 Food additives except those specified hereunder shall be used.

6-1-1 Benzoic acid or benzoate, not exceeding 1000 mg/kg, expressed as benzoic acid.

Compliance is checked by analysis described in AOAC 2000 (AOAC Official method 960.38) or any equivalent method.

6-2 Colour

Synthetic colour is prohibited.

Compliance is checked by analysis described in Pearson's Chemical Analysis of Food, 7th ed. 1976, p. 50-60 or any equivalent method.

6-3 Sweetener

No sweetener other than sugar is permitted.

Compliance is checked by analysis described in Appendix-B.

7- Contaminants

7-1 Lead, not exceeding 1mg/kg.

Compliance is checked by analysis described in AOAC 2000 (AOAC Official method 972.25) or any equivalent method.

7-2 Copper, not exceeding 10mg/kg

Compliance is checked by analysis described in AOAC 2000 (AOAC Official method 960.40*) or any equivalent method.

7-3 Arsenic, not exceeding 0.5mg/kg

Compliance is checked by analysis described in AOAC 2000 (AOAC Official method 912.01) or any equivalent method.

8- Hygiene

8-1 The hygiene of manufacturing products shall conform to the Cambodian Standards on General Guideline for Food Hygiene.

- 8-2 Microorganisms which may be found in the product shall not exceed the following:
- 8-2-1 Total plate count, not to exceed 10,000 colonies/g of sample.
 - 8-2-2 Yeasts and moulds, not to exceed 10 colonies/g of sample.
 - 8-2-3 Coliform, not to be detected in 0.1g of sample.
 - 8-2-4 Clostridium perfringens, not to be detected in 0.1g of sample.
 - 8-2-5 Staphylococcus aureus, not to be detected in 0.1g of sample.
 - 8-2-6 Salmonella, not to be detected in 25g of sample

Compliance is checked by analysis described in “ Microorganism in food, vol.1, the significance and methods of enumeration, 2nd ed., ICMSF 1988” or any equivalent method for following parameters:

- Total plate count: Method 1 (The standard plate count, pour plate or Aerobic plate count), p.115-118;
- Yeasts and moulds: Method 1 (The pour plate yeast and mould count method, p. 158-159;
- Coliforms: Method 1 (North American), p. 270-273;
- Clostridium perfringens: Method 2 (North American), p. 270-273;
- Staphylococcus aureus: Method 1, p. 220-222;
- Salmonella, p. 163-171, or
- Any equivalent method

Note:

ICMSF: International Committee for microbiology specification for food

- 8-3 Aflatoxins, not exceeding 20 µg/kg.

Compliance is checked by analysis described in AOAC 2000 (AOAC Official method 912.01).

9- Containers and packaging

- 9-1 Containers together with lids shall be clean, securely closed and not have any effect on the product.
- 9-2 Net volume shall not be less than 90% of the fill capacity and shall not less than the amounts declared on the label;
- 9-3 The product shall be packed and sealed safely.

10- Marking and labeling

- 10-1 At least, the following information shall be clearly and legibly indicated on each container:
 - 1. The term “Pure chilli sauce “ or “Mixed chilli sauce “, whichever is the case.
 - 2. List of ingredients
 - 3. Food additives, if any
 - 4. Net volume or net weight
 - 5. Date of manufacturing and date of expiry.
 - 6. Name and address of manufacturer, factory, packer or distributor or trade mark.
- 10-2 Each carton of chilli sauce product shall bear the information as specified in clause 10-1 except item 2, and the number of containers therein shall be included.

Note: Any person who manufactures product conforming to this standard may use the product certification mark in connection with his product only after having received a license from the Ministry of Industry, Mines and Energy.

11- Sampling and criteria for conformity

11-1 Definition

- 11-1-1 **Lot:** A group of products of the same size and type manufactured under the same condition.
- 11-1-2 **Lot size:** a number of product units in a lot.
- 11-1-3 **Sample size, n:** A number of sample units to be drawn from each lot for test.
- 11-1-4 **Acceptance number, c:** The maximum number of defectives allowable in product for the acceptance of a lot.

11-2 Unless otherwise specified, the sampling and sample size shall be as follows:

- 11-2-1 Samples shall be drawn at random from products of the same lot, which are of the same name, brand, weight, trade mark and other similar condition. The sample size shall be in accordance with the sampling plan given in Table 1.
- 11-2-2 For microbiological analysis, 4 additional container units shall be sampled at random from the same lot, and the composite sample tested.
- 11-2-3 If the lot fails by the requirement of acceptance numbers for level I inspection, a second sample shall be taken and judged by inspection level II.

11-3 Criteria for conformity

The lot shall be deemed as conforming to this standard provided that the sample meets all requirements of clause 5-1, 6, 7, 8, 9 and 10 and that the number of sample failing to meet the requirements of clause 5-2 does not exceed the acceptance number given in Table 1.

Table 1- Sampling plan and criteria for conformity

Lot size (Unit)	Inspection level			
	Level-1		Level-2	
	n	c	n	c
1- Net weight and net volume of not more than 1kg or 1dm ³ , respectively				
up to 4 800	6	1	13	2
from 4 801 to 24 000	13	2	21	3
from 24 001 to 48 000	21	3	29	4
from 48 001 to 84 000	29	4	48	6
from 84 001 to 144 000	48	6	84	9
from 144 001 to 240 000	84	9	126	13
over 240 000	126	13	200	19
2- Net weight and net volume greater than 1kg or 1 dm ³ , but not more than 4.5 kg or 4.5 dm ³ , respectively				
up to 2 400	6	1	13	2
from 2 401 to 15 000	13	2	21	3
from 15 001 to 24 000	21	3	29	4
from 24 001 to 42 000	29	4	48	6
from 42 001 to 72 000	48	6	84	9
from 72 001 to 120 000	84	9	126	13
over 120 000	126	13	200	19
3- Net weight and net volume greater than 4.5 kg or 4.5 dm ³ , respectively				
up to 600	6	1	13	2

from	601	to	2 000	13	2	21	3
from	2 001	to	7 200	21	3	29	4
from	7 201	to	15 000	29	4	48	6
from	15 001	to	24 000	48	6	84	9
from	24 001	to	42 000	84	9	126	13
		over	42 000	126	13	200	19

12- Inspection and analyzes

12-1 Color, texture, freedom from defect, flavor and consistency

12-1-1 Apparatus

12-1-1-1 Porcelain bowls

12-1-1-2 Stainless steel spoons

12-1-2 Procedure

12-1-2-1 The product shall be inspected by a panel comprising at least 5 judges who are conversant with the factors governing the quality of the product. Each judge shall independently inspect the product and assign scores for deferent characteristics. Total score and system of scoring are given in clause 12-1-2-2 and 12-1-2-3, respectively.

12-1-2-2 The characteristics given in Table the following table shall be considered for scoring:

Item	Full score
Color	20
Texture	20
Freedom from defect	20
Flavor	20
Consistency	20
Total score	100

12-1-2-3 System of scoring

Score	Inspection item				
	Color	Texture	Freedom from defects	Flavor	Consistency
0 – 13	Poor	Poor	Poor	Poor	Poor
14 -16	Fair	Fair	Fair	Fair	Fair
17 - 20	Good	Good	Good	Good	Good
