**Processed Cheese — Specification**

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#### Foreword

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This African Standard was prepared by the ARSO Technical Committee on Milk and milk products (ARSO/TC 04)

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**Processed Cheese - Specification**

## AFRICAN STANDARD

1 Scope

This African Standard specifies requirements, sampling and test methods for processed cheese intended for direct consumption or further processing.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CODEX STAN 192, *General Standard for Food Additives*

CXS 193 ,General *Standard for Contaminants and Toxins in Food and Feed*

CXC 1, *General Principles of Food Hygiene*

CXC 57, *Code of Hygienic Practice for Milk and Milk Products*

CXG 21, *Establishment and Application of Microbiological Criteria Related to Foods*

CXS 234, Recommended Methods of Analysis and Sampling

ARS 56, *Pre-packaged foods — Labelling*

WD-ARS XXX - Glossary of Dairy Terms

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

**Processed cheese:**

**Process**(ed) cheese and spreadable process (ed) cheese are made by grinding, mixing, melting and emulsifying with the aid of heat and emulsifying agents one or more varieties of cheese, with or without the addition of milk components and/or other foodstuffs in accordance with the optional raw materials mentioned in Section 4.1.2

4 Requirements

4.1 Raw materials

**4.1.1 Essential raw materials**

- Cheese and its varieties,

- Emulsifying Agents

**4.1.2 Optional raw materials**

1. Milk, Powdered milk, Cream, buttermilk partially or wholly dehydrated, preparations of proteins of dairy origin, including caseins and caseinate requirements;
2. Salt (sodium chloride)
3. Potable water
4. Vinegar
5. Citric acid
6. Lactic acid;
7. Phosphoric acid;
8. Nisin;
9. Sodium citrate;
10. Added condiments and acidifying agents;
11. Permitted emulsifiers or stabilizers;
12. Spices, herbs and aromatic plants and other vegetable seasonings in sufficient quantity to characterize the product;
13. Cultures of harmless bacteria and enzymes and/or aroma-producing bacteria and other cultures of harmless microorganisms
14. Harmless and suitable enzymes.
15. Gelatine and/or starch for processed cheese preparations only, with a maximum of 10 g/kg of product alone or combined and/or in combination with the stabilisers/thickeners listed in section 5.
16. The incorporation of fats and proteins not coming from milk is however prohibited.

*Note*: Gelatine has to be Halal for Muslim countries.

4.2 General requirements

Processed cheese shall meet the following general requirements:

- Processed cheese shall have smooth, clean, neat unbroken rind and attractive appearance.

- Processed cheese shall have characteristic colour and flavour of the product

- Sliceable cheese shall be slightly elastic, break easily, and shall not be hard when crushed between fingers;

- Spreadable cheese shall be continuous and homogenous.

- All processed cheese shall be free from openings, holes, breaks, cracks or fissures.

4.3 Compositional requirements

4.3.1 Processed cheese shall be categorized as follows in accordance with the requirements given in Table1:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Parameter | Requirements | Test Method |
| 1 | Minimum fat in dry matter content (%)(m/m). | 25% | ISO 1735 |
| 2 | Dry matter content ((%)(m/m) | 30 - 75% | ISO 5534 |
| 3 | Salt (sodium, calcium or potassium) (dry matter basis), % m/m, max. | 3 % | ISO 5943 |

5 Food Additives

Food additives may be used and only within the limits specified in General Standard for Food Additives – Category 01.6.4 and Table 3 of CXS 283.

6 Contaminants

The products covered by this African Standard shall comply with the Maximum Levels for contaminants that are specified for the product in the General Standard for Contaminants and Toxins in Food and Feed (CXS 193).

7 Hygiene

It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the General Principles of Food Hygiene (CXC 1), the Code of Hygienic Practice for Milk and Milk Products (CXC 57) and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice. The products should comply with any microbiological criteria established in accordance with the Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CXG 21).

**Table 2: Microbiological limits for Processed Cheese**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Food Category**  **(Matrix)** | **Micro-organisms** | **Sampling plan** | | **Limits** | | **Test method reference** | **Observations** |
| **n** | **c** | **m** | **M** |  |
| Processed Cheese | Salmonella | 5 | 0 | Absence in 25 g | | ISO 6579-1 | All stages |
| Processed Cheese ready-to-eat foods able to support the growth of L. monocytogenes, other than those intended for infants and for special medical purposes | Listeria monocytogenes | 5 | 0 | Absence in 25 g | | ISO 11290-1 | Products placed on the market during their shelf-life |
| Listeria monocytogenes | 5 | 0 | 102  cfu/gm | | ISO 11290-1 | Before the product has left the immediate control of the food business operator, who has produced it |
| Processed cheese made from raw milk | Staphylococcal entero-toxins | 5 | 2 | 104 cfu/gm | 105  cfu/gm | ISO 6888-2 | At the time during the manufacturing process when the number of staphylococci is expected to be highest |
| Processed cheese made from **milk or whey that has undergone heat treatment** | Staphylococcal entero-toxins | 5 | 2 | 102 cfu/gm | 103  cfu/gm | ISO 6888-1 or 2 |
| Processed cheese made from **milk or whey that has undergone heat treatment** | Escherichia Coli  *(Used here as an indicator for the level of hygiene).* | 5 | 2 | 102 cfu/gm | 103  cfu/gm | ISO 16649-1  or 2 | At the time during the manufacturing process when the E. coli count is expected to be highest |
| Unripened soft cheeses (fresh cheeses) made from milk or whey that has undergone pasteurisation or a stronger heat treatment | Escherichia Coli  *(Used here as an indicator for the level of hygiene).* | 5 | 2 | 102 cfu/gm | 103  cfu/gm | EN/ISO 6888-1 or 2 | End of the manufacturing process |
| Processed cheese made from **raw milk** | Escherichia Coli  *(Used here as an indicator for the level of hygiene).* | 5 | 2 | 104 cfu/gm | 105  cfu/gm | ISO 16649-1  or 2 | At the time during the manufacturing process when the E. coli count is expected to be highest |
| Processed cheese made from milk that has undergone a lower heat treatment than pasteurisation | Coagulase-Positive Staphylococci | 5 | 2 | 102 cfu/gm | 103  cfu/gm | ISO 6888-1  or 2 | At the time during the manufacturing process when the number of staphylococci is expected to be highest |
| Processed cheese made from raw milk | Coagulase-Positive Staphylococci | 5 | 2 | 104 cfu/gm | 105  cfu/gm | ISO 6888-1 |

n = number of units comprising the sample; c = number of sample units giving values between m and M.

m= The level of the required MCR in the product

M= Value or level of microbial limit not to be reached or greater than in any unit of the sample

8 Labelling

In addition to the provisions of ARS 56 the following specific provisions apply:

1. List of ingredients
2. Name and address of manufacturer or distributor or packer.
3. net weight in metric unit.
4. Country of origin.
5. ‘Best before date’ (dd/mm/yy).
6. storage Conditions and instructions.
7. lot identification, batch or code number.
8. The language on the label shall be English. Additional language may be used depending on the designated market.
9. Allergen information

8.1 Name of the food

The name of the food shall be determined according to the composition in Clause 4.3.

If a specific cheese name is associated with the product i.e., Cheddar processed cheese, the specified cheese shall be at least 50% of the formulation in the final product. For Blue mould cheese, it shall consist of 42% of the final product. These cheese types will be identified in the ingredient list with the relevant cheese percentage % (percentage) present in the final product formulation.

The word “process” in the name of process cheese with or without added foodstuff may be substituted by the word “processed”.

8.2 Declaration of milkfat content

If the consumer would be misled by the omission, the milkfat content shall be declared in a manner found acceptable in the country of sale to the final consumer, either

1. as a percentage by mass,
2. in grams per serving as quantified in the label provided that the number of servings is stated.

8.3 Declaration of milk protein

If the consumer would be misled by the omission, the milk protein content shall be declared in a manner acceptable in the country of sale to the final consumer, either as

1. a percentage by mass,
2. or grams per serving as quantified in the label provided the number of servings is stated.

8.4 Labelling of non-retail containers

Information required in Section 7 of this Standard and Sections 4.1 to 4.8 of the African Standard for the Labelling of Pre-packaged Foods ARS 56, and, if necessary, storage instructions, 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 or packer shall appear on the container.

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

**9 Packaging**

A container or outer container in which the Processed Cheese is packed shall:

(a) be made from a material that :

(i) is suitable for this purpose;

(ii) will protect the contents thereof from contamination; and

(iii) will not impart any undesirable flavour or taste to the contents thereof;

(b) be so strong that it will not be damaged or deformed during normal storage, handling and transport practices;

(c) in the case of a container that is re-used, be thoroughly cleaned and sterilized before the Processed Cheese is packed therein;

(d) be intact; and

(e) be closed properly in a manner permitted by the nature thereof.

**10 Methods of Sampling and Analysis**

For checking the compliance with this standard, the methods of analysis and sampling contained in the Recommended Methods of Analysis and Sampling (CXS 234-1999) relevant to the provisions in this standard, shall be used.

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