**Extra hard grating cheeses — Specification**

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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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**Standard for extra hard grating cheeses - Specification**

## AFRICAN STANDARD

1 Scope

This Standard specifies requirements, sampling and test methods for extra hard grating cheeses, intended for direct consumption or further processing,

2 Normative references

The following Standards are referred to in the text in such a way that some or all of their content constitutes requirements of this Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced Standard (including any amendments) applies.

ARS 56, Pre-packaged foods — Labelling

ARS XXX - Glossary of Dairy Terms

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*

ISO 6579-1, Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp.

ISO 6888-1, Microbiology of the food chain-Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) :Part 1: Method using Baird-Parker agar medium

 ISO 11290-1, Microbiology of the food chain — Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. — Part 1: Detection method

ISO 16649-1, Microbiology of the food chain-Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli: Part 1: Colony-count technique at 44 degrees C using membranes and 5-bromo-4-chloro-3-indolyl beta-D-glucuronide

3 Terms and definitions

For the purpose of this document, the terms and definitions in ARS XXX and the following apply:

3.1 Grating cheese

Ripened cheese with a slightly brittle, dry texture that is so hard that it is difficult to cut and is often served as shards or shredded over a dish. It has an extra hard rind which may be coated with vegetable oil, food grade waxes or polyfilm. Grating cheeses have a low moisture content that they are self – stable. Frequently, they are age for a multiple years. Period of curing is at least 6 months.

4 Requirements

4.1 Raw materials

**4.1.1 Essential Raw materials**

1. milk obtained from cows, goats, sheep, camels or their mixture
2. cultures of harmless lactic acid producing bacteria (starter)
3. rennet or other suitable coagulating enzymes
4. food grade table salt (sodium chloride).

**4.1.2 Optional Ingredients**

1. calcium chloride, max.200 mg anhydrous/kg of the milk used
2. harmless flavour producing bacteria
3. harmless enzymes to assist in flavour development (solids of preparation not to exceed 0.1% of weight of milk used)
4. chlorophyll, including copper chlorophyll complex, max. 15 mg/kg cheese
5. sorbic acid or its sodium or potassium salts, maximum 1 g/kg calculated as sorbic acid in the final product.

4.2 General requirement

Cheese shall be free from dirt and foreign matter.

4.3 Principal Characteristics of the Cheese Ready for consumption

**4.3.1 Consistency:** extra hard, suitable for grating

**4.3.2 Shape**: various.

**4.3.3 Dimensions and weights**: various.

**4.3.4 Rind (where present)**

4.3.4.1: Consistency: extra hard.

4.3.4.2: Appearance: dry, may be coated with vegetable oil, food grade wax or plastic materials.

4.3.4.3: Colour: amber.

**4.3.5 Body**

4.5.1 Texture: granular, slightly brittle.

4.5.2 Colour: natural uncoloured to light cream colour.

**4.3.6 Holes (when holes are a typical characteristic of the variety)**

4.3.6.1 Number: few.

4.3.6.2 Shape: small, round.

4.3.6.3 Size: approximately 1–2 mm.

4.3.6.4 Appearance: characteristic gas holes

**4.3.7 Minimum fat content in dry matter**: 32%

**4.3.8 Maximum moisture content:** 36%

5 Food Additives

Food additives may be used and only within the limits specified in General Standard for Food Additives (CODEX STAN 192) – Category 01.6.2 (Ripened cheese), also the ones in Table 3 of CXS 193 considering its Annex.

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).

 **6.1** Veterinary drug residue and pesticides shall comply to those listed in the Codex database.

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 1-1969), the Code of Hygienic Practice for Milk and Milk Products (CXC 57-2004) 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 21-1997).

**Table 1- Microbiological limits for extra hard grating cheeses**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Food Category** | **Micro-organisms** | **Sampling plan** | **Limits** | **Test method reference** |
| **n** | **c** | **m** | **M** |
| Ripened cheese  | Salmonella | 5 | 0 | Absence in 25 g | ISO 6579-1 |
| Listeria monocytogenes | 5 | 0 | Absence in 25 g | ISO 11290-1 |
| Coagulase-positive staphylococci | 5 | 0 | 102 cfu/gm | 103cfu/gm | ISO 6888-1 |
| Escherichia Coli | 5 | 1 | 102 cfu/gm | 103cfu/gm | ISO 16649-1 |

8 Labelling

In addition to the provisions of the ARSO standard ARS 56, the following specific provisions shall apply:

8.1 Name of the food

Only cheese conforming with this standard may be designated Extra Hard Grating Cheese or any recognized variety name in the consuming country. A “coined” or “fanciful” name, may be used however, provided it is not misleading and is accompanied by the phrase “Extra Hard Grating Cheese”.

It shall be labelled in conformity with the appropriate sections of the ARS 1073.

8.2 Additional Mandatory Requirements.

1. List of ingredients including ingredients or food additives; if vitamins or minerals are added, these should be indicated.
2. Name and address of manufacturer, distributor, importer 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. Allergen information

8.3 Labelling for Non-Retail Container

Information required in Section 8 of this Standard and Sections 4.1 to 4.8 of the General Standard for the Labelling of Pre-packaged Foods (CXS 1-1985), 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, and in the absence of such a container on the cheese itself. 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**

Extra hard grating cheeses shall be packaged in suitable food grade containers or outer containers that are:

 (a) be made from a material that is:

 (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 a dairy product 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.

Bibliography

CXS 278- Standard for extra hard grating cheeses.

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