



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 2

CX/MAS 25/44/2 Add.1
April 2025

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING**

44th Session

Virtual

5 – 8 May and 14 May 2025

**MATTERS REFERRED TO THE COMMITTEE BY THE 55TH SESSION OF CODEX COMMITTEE ON
FOOD ADDITIVES**

Matters for Action

Revisions to the *Standard for food grade salt* (CXS 150-1985)¹

1. In response to the amendments adopted by the 39th Session of the Codex Alimentarius Commission (CAC39) (2016) to the Procedural Manual, recognizing the *Recommended methods of analysis and sampling* (CXS 234-1999) as the sole reference for methods of analysis and sampling, CCFA55 agreed to replace Sections 9.2 to 9.13 of the *Standard for food grade salt* (CXS 150-1985) with a general reference to CXS 234-1999.
2. CCFA55 noted that the analytical methods currently listed in CXS 150-1985 are already included in CXS 234-1999. However, for the determination of sodium chloride, CXS 234-1999 refers to a method "described in the *Standard for food grade salt*" (for details, please see Appendices I and II).
3. In light of this, CCFA55 agreed to request that CCMAS consider the inclusion of the method for the determination of sodium chloride, as currently described in CXS 150-1985, into CXS 234-1999.

¹ REP25/FA, para 21(ii)

Appendix I

Provisions related to sodium chloride in [CXS 150-1985](#) and [CXS 234-1999](#)**Part A: CXS 150-1985**

9. METHODS OF ANALYSIS AND SAMPLING
- 9.1 SAMPLING (SEE APPENDIX)
- 9.2 DETERMINATION OF SODIUM CHLORIDE CONTENT

This method allows the calculation of sodium chloride content, as provided for in Section 3.1, on the basis of the results of the determinations of sulphate (Method 9.4), calcium and magnesium (Method 9.5), potassium (Method 9.6) and loss on drying (Method 9.7). Convert sulphate to CaSO_4 and unused calcium to CaCl_2 , unless sulphate in sample exceeds the amount necessary to combine with calcium, in which case convert calcium to CaSO_4 and unused sulphate first to MgSO_4 and any remaining sulphate to Na_2SO_4 . Convert unused magnesium to MgCl_2 . Convert potassium to KCl . Convert unused halogens to NaCl . Report the NaCl content on a dry matter basis, multiplying the percentage NaCl by $100/100-P$, where P is the percentage loss on drying.

Part B: CXS 234-1999

Miscellaneous products				
<i>Commodity</i>	<i>Provisions</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Food-grade salt	Sodium chloride	Described in the standard	Calculation	I

Provisions from CXS 150-1985 that are already included in CXS 234-1999

Miscellaneous products				
<i>Commodity</i>	<i>Provisions</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Food-grade salt	Arsenic	EuSalt/AS 015	ICP-OES	IV
Food-grade salt	Cadmium	EuSalt/AS 015	ICP-OES	III
Food-grade salt	Cadmium	EuSalt/AS 014	Atomic absorption spectrophotometry	IV
Food-grade salt	Calcium and magnesium	ISO 2482	Complexometric titrimetry	II
Food-grade salt	Calcium and magnesium	EuSalt/AS 009	Flame atomic absorption spectrometry	III
Food-grade salt	Calcium and magnesium	EuSalt/AS 015	ICP-OES	III
Food-grade salt	Copper	EuSalt/AS 015	ICP-OES	III
Food-grade salt	Insoluble matter	ISO 2479	Gravimetry	II
Food-grade salt	Iodine	EuSalt/AS 002	Titrimetry using sodium thiosulphate	II
Food-grade salt	Iodine	EuSalt/AS 019	ICP-OES	III
Food-grade salt	Iodine	WHO/UNICEF/ICCIDD method ² Only applicable to a product which has been fortified with iodate	Titrimetry using sodium thiosulphate	IV
Food-grade salt	Loss on drying	ISO 2483	Gravimetry (drying at 110 °C)	I
Food-grade salt	Mercury	EuSalt/AS 012	Cold vapour atomic absorption spectrophotometry	IV
Food-grade salt	Potassium	EuSalt/AS 008	Flame atomic absorption spectrophotometry	II
Food-grade salt	Potassium	EuSalt/AS 015	ICP-OES	III
Food-grade salt	Sodium chloride	Described in the standard	Calculation	I

² Assessment of iodine deficiency disorders and monitoring their elimination. A guide for programme managers. Third edition, Annex 1: Titration method for determining salt iodate and salt iodine content. World Health Organization, Geneva, 2007. The report is available from http://www.who.int/nutrition/publications/micronutrients/iodine_deficiency/WHO_NHD_01.1/en/index.html

Miscellaneous products

Food-grade salt	Sulphate	ISO 2480	Gravimetry	II
Food-grade salt	Sulphate	EuSalt/AS 015	ICP-OES	III
Food-grade salt	Sulphate	EuSalt/AS 018	Ion chromatography	III

Commodity	Provision	ML (mg/kg)	Method performance criteria						
			Minimum applicable range (mg/kg)	Limit of detection (LOD) (mg/kg)	Limit of quantification (LOQ) (mg/kg)	Precision (RSDR) (%) no more than	Recovery (%)	Example of applicable methods that meet the criteria	Principle
Salt, food grade	lead	1	0.5–1.5	0.1	0.2	32	80–110	EUsalt/AS 015, EN 17851, EN 14083	ICP-OES ICP-MS GF-AAS