# GOVERNMENT NOTICES GOEWERMENTSKENNISGEWINGS

# DEPARTMENT OF HEALTH DEPARTEMENT VAN GESONDHEID

No. R. 184

9 March 2007

# FOODSTUFFS, COSMETICS AND DISINFECTANTSACT, 1972 (ACT NO. 54 OF 1972)

## **REGULATIONS RELATING TO FOOD-GRADE SALT**

The Minister of Health has, in terms of section 15 (I) the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972), (hereinafter referred to as "the Act"), made the regulations in the Schedule.

# SCHEDULE

#### Definitions

1. In these regulations any expression to which **a** meaning has been assigned in the Act shall bear that meaning and, unless the context indicates otherwise-

"compound foodstuffs" means a foodstuff containing food-grade salt as an ingredient or flavourant and which the crystalline characteristic of the food-grade salt has been changed owing to it being dissolved or absorbed by other ingredients present in the foodstuff and in which the presence of potassium iodate shall have an undesirable effect on the characteristics of such foodstuff;

"contaminant" means any substance which, although not added intentionally to a foodstuff, is present in such foodstuff as a result of the production (including operations carried out in crop husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such foodstuff or as a result of environmental contamination, but does not include insect fragments, rodent hairs and other extraneous matter; "food additive" means any substance not normally consumed as a foodstuff by itself and not normally used as a typical ingredient of the foodstuff, whether or not such substance has nutritive value, which is intentionally added to a foodstuff for a technological (including sensoric) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or storage of such foodstuff and which results or may reasonably be expected to result (directly or indirectly) in such substance or the by- products thereof becoming a component of or otherwise affecting the characteristics of such foodstuffs, but excludes any substance added to foodstuffs for maintaining or improving nutritional qualities or contaminants;

"food-grade salt" means a crystalline product consisting of 97% sodium chloride, which is used as an ingredient or flavourant in or on a foodstuff, and which may be obtained from the sea, underground rock salt deposits or natural brine, and which can also be referred *to* as table salt, cooking salt, flavoured salt or dendritic salt;

"GMP" means limited by good manufacturing practice;

"impermeable packaging material" means material which consists of one or more of the following substances: Low density polyethylene, high density polyethylene, woven polypropylene or similar materials, and includes polycoated cardboard;

"iodated salt" means food-grade salt to which 35 to 65 mg/kg of potassium iodate has been added;

"low sodium salt" means salt containing less than 67% sodium chloride;

"natural secondary products" means products other than sodium chloride which are naturally present in the raw material from which food grade salt is manufactured; "nutrient" means any substance consumed as a constituent of a foodstuff and which provides energy or which is needed for growth, development and the maintenance of life or a deficiency of which causes characteristic biochemical or physiological changes to occur;

"the Act" means the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).

### Composition

(I) pood-grade salt shall not contain less than 97% sodium chloride on a dry matter basis, exclusive of food additives.

(2) The remainder of the food-grade salt referred to in subregulation (1) shall comprise natural secondary products which are present in varying proportions depending on the origin and the method of production of the salt and which are composed mainly of -

- (a) calcium sulphates, potassium sulphates, magnesium sulphates;
- (b) calcium carbonates, potassium carbonates, magnesium carbonates and sodium carbonates;
- (c) calcium bromides, potassium bromides, magnesium bromides and sodium bromides; and
- (d) calcium chlorides, potassium chlorides and magnesium chlorides.

(3) Food grade salt shall be used as a carrier for food additives or nutrients for technological or public health reasons.

## Iodation

3. (1) No person shall sell food-grade salt unless iodine, which is between 35 and 65 ppm (mg/kg) has been added to such salt.

(2) Potassium iodate shall be used for the iodation of food-grade salt.

(3)Imported food-grade salt shall contain between 35 and 65 ppm (mg/kg) iodine on entering the Republic of South Africa.

(4) Food-grade salt which is exported from the Republic of South Africa may contain more than 65 ppm (mglkg) of iodine.

(5) lodatedfood-grade salt shall be packed in impermeable packaging material.

(6) Sampling of iodated salt for compliance monitoring purposes in terms of subregulation (1) shall be done at the **point** of processing and packaging, and **shall** be done in accordance with the Codex Standard for Food-Grade Salt (CX STAN 150-1985), Appendix.

(7) Salt processors shall, for quality control purposes, **analyse** each batch **of** the iodated salt for its iodine **content** according to the methods listed in Annexure II.

# **Food additives**

4. Food-grade salt may contain any **food** additive listed in Column I of the table below subject to the conditions and limits indicated opposite thereto in Column II.

Ι	ll ll
Food additives	Maximum level in the final
	product
(a) Anticacking agents	
Tricalcium phosphate	20 mg/kg
Calcium and/or magnesium carbonate	GMP
Calcium, magnesium, sodium-aluminium or	
calcium-aluminiumsilicates	GMP
Calcium, potassium or sodium salts or	
myristic, palmitic or stearic acids	GMP
Magnesiumoxide	GMP
Silicon dioxide, amorphous	GMP
Calcium, potassium or sodium	
ferrocyanides	10 mg/kg singly or in
	combination expressed as
	[Fe (CN <sub>6</sub> ] <sup>3-</sup>
(b) Emulsifiers	
Polysorbate80	10 mg/kg
(c) Processing aid	
Dimethylpolysiloxane	10 mg residue/kg

### Contaminants

Food-grade salt shall not contain contaminants listed in Column I of the table exceeding the maximum limits indicated opposite thereto in Column II.

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Contaminant	Maximum limit (mg/kg)
1. Arsenic	0.5 expressed as As
2. Copper	2 expressed <b>as</b> Cu
3. Lead	2 expressed as Pb
4. Cadmium	0.5 expressed <b>as</b> Cd
5. Mercury	0.1 expressed as Hg

#### Labelling

6. (1) The name of the product as declared on the label shall be "salt".

(2) In close proximity to the name "salt" referred to in subregulation (1), a description of the type of salt shall be affixed.

(3) Where food-grade salt is not iodated in accordance with these regulations, the term Inon-iodated salt' shall appear on the label.

(4) Where food-grade salt is **used** as a carrier for one or more nutrients and sold as such for public health reasons –

(a) the name of the product shall be declared on the label, for example, "iodated salt", "salt fortified with iron", or "salt fortified with vitamins";

(b) added nutrients shall be declared on the label;

(c) the claim "lodated for better health and the official iodation logo to that effect are reserved only for food-grade salt fortified with iodine and may be displayed on the label **or** in advertising material, and the display thereof shall be in accordance with Annexure I of these Regulations;

(d) iodine shall-

- (i) be in the list of ingredients and will be identified individually by the compound names; and
- (ii) be indicated.as potassium iodate in the table with nutritional information; and

(e) Any person who uses the official health claim and logo on labels or in advertising material for salt other than in accordance with the Regulations or any other regulations under the Act, shall be guilty of an offence,

(5) An indication of either the origin of food-grade salt or the method of production of such food-grade salt may be declared on the label.

(6) Notwithstanding the provisions of these regulations, food-grade salt shall be labelled in accordance with the provisions in the Regulations Governing the Labelling and Advertising of Foodstuffs, Government Notice **No.** R. 2034 of October 1993.

#### Methods of analysis

**7.** The methods which shall be used for determining the content of sodium chloride and that of other constituents and properties in food-grade salt are listed in the Annexure II.

#### Application and exemptions

- 8. (1) These regulations shall apply to salt used as-
  - (a) a foodstuff or as an ingredient of **a** foodstuff for direct sale to the consumer and for foodstuff manufacturing; or
  - (b) a carrier of food additives and/or nutrients;

(2) These regulations shall not apply to salt from origins other than those referred to in the definition of "food-grade salt", especially not salt which is a by-product of chemical industries or low sodium salt.

(3) The provisions of regulation 3 to these regulations shall not apply to-

- (a) salt intended for manufacture of compound foodstuffs; and
- (b) salt available at pharmacies in packages of 500 grams or less; which is labelled 'non-iodated salt'.

(4) Processors, packers or importers of food-grade salt products packed in quantities not larger than 250 g who wish, for any reason, to **be** exempted from the provisions of regulation 3 should apply to the Director-General of the Department of Health, for attention: Directorate: Food Control.

#### Repeal

9. Government Notice No. R. 239 of 16 March 2001, as corrected by Government Notice No. R. 1102 of 9 November 2001 and amended by Government Notice No. R. 1368 of 21 December 2001 is hereby repealed.

ME TSHABALALA-MSIMANG MINISTER OF HEALTH

15. 2. 2007

#### **ANNEXURE I**

#### REQUIREMENTS FOR THE USE OF THE LOGO AND HEALTH CLAIM

- a) Wherever the health claim and/or the official logo are used, it shall be printed in a prominent position on the main panel in bold print against a contrasting or clear background on all types of packaging materials. The logo shall be clearly visible, easily legible and indelible;
- b) The mandatory nutritional information declaration as described in relevant Annex of the Regulations Relating to the Labelling and Advertising of Foodstuffs, Government Notice No. R. 2034 of October 1993 shall be printed on the back or side panel in letters at least I mm in height for lower case letters, or a bigger letter size in the case of polypropylene packaging material, provided the information is legible.
- c) The nutritional information declaration referred to in Regulation 6 (4) (b) as well as nutritional information relevant to the iodation specifications shall be declared per 100 grams.
- d) The official logo shall be a minimum size of 25 mm for paper and plastic packaging and a minimum size of 100 mm for woven polypropylene packaging.
- e) The design of the logo shall be constructed as indicated in facsimile 1.
- 9 The logo may be printed in monochrome as per facsimile 1, of in any of the selected main colours of the packaging.
- g) Where the full colour version of the **logo** is used, the following **colours** shall be used in accordance with facsimile 2:

Grass		Pantone 390	(45c	100y)
Male's	<b>s shorts:</b> Green 2	Pantone 349	(100c	100y 54k)
Sun:	Orange 1	Pantone 123	(28m	100y)
Back	fomalo's arm	s x 2, legs x 2, hea	4.	
Dack	-	Pantone 138		100y 8k)
Back	fomalo's skii	rt, front female's ey	06 V 2.	
Dack		Pantone 3015	G3 A Z.	(100c 40k)
Front	female's T-s	birt.		
		Pantone 274	(100c	100m 30k)
Sky:				
	Blue 3	Pantone 290	(10c)	
Front	female's arn	ns x 2, legs x 2, hea	ad:	
	Flesh	Pantone 719		18y)
Male's T-shirt:				
	Yellow	Process yellow	(100y)	)
Male's arms x 2, legs x 2, head:				
maic	Brown	Pantone 470	(56m	78y 40k)
			(5011	
Back <b>female's</b> T-shirt, mouth, front female's skirt and mouth:				
	Red	Pantone 485		n 100y)

Male's hair, eyes x 2, mouth, back female's hair, eyes x 2, front female's hair, outer circular border, all payoff lines:

Black Process black

Facsimile

Facsimile 2:





### **ANNEXURE II**

## METHODS OF ANALYSIS

#### Determination of sodium chloride content method

The determination of sodium chloride content method allows for the calculation of sodium chloride content in food-grade salt as provided for in regulation 2 **based** on the result of the determination of sulphates, halogens, calcium, magnesium, potassium and loss on drying. Convert sulphate to calcium sulphate and the unused sulphate first to magnesium sulphate and any remaining sulphate to sodium sulphate. Convert unused magnesium to magnesium chloride. Convert potassium to potassium chloride. Convert unused halogens to sodium chloride. Report sodium chloride on a dry matter basis, multiplying the percentage sodium chloride **by** 100/1 00-P, where P is the percentage loss on drying.

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Substance/property tested for	Test method	
in food grade salt		
Insoluble matter	ISO 2479-1972 Determination of matter	
	insoluble in water $\operatorname{or}$ in acid and the	
	preparation of principal solutions for other	
	determinations.	
Sulphate content	ISO 2480-1972 Determination of sulphate	
	content. Barium sulphate gravimetric method.	
Halogens	ISO 2481-1973 Determination of halogens,	
	expressed as chlorine. Mercurimetric method.	
Calcium and Magnesium	ISO 2482-1973 Determination of calcium and	
contents	magnesium contents. EDTA complexometric	
	methods.	

#### 2. Test methods for other constituents and properties in food grade salt

<sup>o</sup> otassium content	ESPAICN-EII03-1994 Determination of
	potassium content by sodium
	tetraphenylborate volumetric method or
	alternatively according to the ESPA/CN-
	E/104-1994 Flame atomic method.
Loss on drying (conventional	ISO 2483-1973 Determination of the loss of
nethod)	mass at 110 °C
Copper content	ESPA/CN-E/101-1994 Determination of
	copper content. Zinc dibenzyl dithiocarbamate
	photometric method.
Arsenic content	ESPA/CN-E/105-1994 Determination of
	arsenic content. Silver diethyldithiocarbamate
	photometric method.
Mercury content	ESPA/CN-E/106-1994 Determination of total
	mercury content. Cold vapour atomic
	absorption spectrometric method.
Lead content	ESPA/CN-E/108-1994 Determination of total
	lead content. Flame atomic absorption
	spectrometric method.
Cadmium content	ESPA/CN-E/107-1994 Determination of total
	cadmium content. Flame atomic absorption
	spectrometric method.
lodine content	ICCIDD (1995)*: Determination of total iodine
	content. lodiometric titration method or
	potentiometric method.

\*UNICEF, PAMM, MI, ICCIDD, WHO. Sullivan, K. M; Houston, R.; Gorstein, J.; Cervinskas, J. (eds) (1995). *Monitoring Universal Salt Iodization* Programmes. PAMM/MI/ICCIDD, Atlanta, 1995

# Abbreviations used in table:

ESPA/CN:	European Salt Producers' Association/"Commission de	
normalization des methods d'analyse"		

- **ICCIDD:** International Council for Iodine Deficiency Disorders
- ISO: International Standards Organisation