

DEPARTMENT OF HEALTH

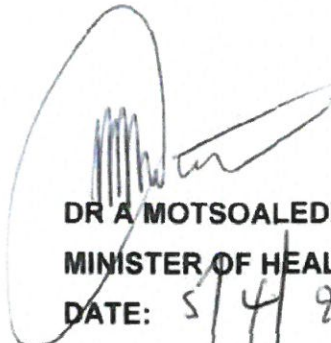
NO. 588

15 JUNE 2018

**FOODSTUFFS, COSMETICS AND DISINFECTANTS ACT, 1972  
(ACT NO. 54 OF 1972)**

**REGULATIONS RELATING TO MAXIMUM LEVELS OF METALS IN  
FOODSTUFFS**

The Minister of Health has, in terms of section 15 (1) of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972), made the Regulations set out in the Schedule.



**DR A MOTSOALEDI, MP**  
**MINISTER OF HEALTH**  
DATE: 5/4/2018

## SCHEDULE

### 1. Definitions

In these Regulations a word or expression defined in the Act bears the meaning so assigned and, unless the context otherwise indicates –

**"Berries and other small fruits"** means food derived from a variety of perennial plants and shrubs having fruit characterized by a high surface: weight ratio. Examples include, Agritos; Amur river grape; Arguta kiwifruit; Aronia berries; Bayberries; Bearberry; Bilberry; Bilberry, Bog; Bilberry, Red; Blackberries; Blueberries; Buffaloberry; Buffalo currant; Che; Chilean guava; Cloudberry; Cranberry; Currants, Black, Red, White; Dewberries; Elderberries; European barberry; Guelder rose; Gooseberry; Grapes; Huckleberries; Jostaberries; Juneberries; Mulberries; Muntries; Native currant; Partridge berry; Phalsa; Raspberries, Red, Black; Ribberries; Rose hips; Salal; Schisandraberry; Sea buckthorn; Service berries; Silverberry, Russian; Strawberry; Strawberries, Wild; Table grapes; Vaccinium berries and Wine grapes;

**"bulb vegetables "** means pungent highly flavoured foods derived from fleshy scale bulbs (in some commodities including stem and leaves), of the genus Allium. Examples include; garlic, onion, carosella, chives, shallots, leek, fennel, kurrat and rakkyo;

**"brassica vegetables "** means foods derived from the leafy heads, stems and immature inflorescences of plants belonging to the genus Brassica of the family Cruciferaeh. Examples include brussels sprouts, broccoli, cabbage, kailan, kohlrabi, cauliflower, pakchoi and collards;

**"cereal grains"** means foods derived from the ears (heads) of starchy seeds produced by a variety of plants, primarily of the grass family (Gramineae) and includes Buckwheat and *Chenopodium*;

**"fish"** means all aquatic vertebrates of the super class, *Osteichthyes*, unless otherwise specified;

**"fruiting vegetables "** means plants of the gourd family "*Cucurbitaceae*". Examples include melons, musk melons, butternuts, cantaloupes, watermelon, pumpkins, squashes (including summer and winter squash), patty pans, gourds, zucchini, cucumbers and gherkins, unless otherwise stated;

**"leafy vegetables"** means. foods derived from the leaves of a wide variety of edible plants, usually annuals or biennials. Examples include spinach, endive, celery, fennel, parsley, lettuce, rhubarb, Swiss chard, mustard and rape, unless otherwise stated;

**"legumes"** means foods derived from the succulent seed and immature pods of leguminous plants commonly known as beans and peas;

**"maximum level (ML)"** means the maximum concentration of a substance permitted based on the edible content of the foodstuff, i.e. that part of the foodstuff that is normally consumed;

**"metal"** includes any chemical form of that metal;

**"pulses"** means foods derived from the mature, naturally or artificially dried seeds, of leguminous plants known as dry beans and dry peas;

**"root and tuber vegetables"** means foods derived from starchy enlarged solid roots, tubers, corms or rhizomes, mostly subterranean, of various species of

plants, mostly annuals Examples include artichoke, parsnips, sugar beet, garden beet, beetroot, yams, turnips, potatoes, sweet potatoes, cassava, garden radish, radishes, horseradish and chicory;

**"stalk and stem vegetables"** are the edible stalks, leaf stems or immature shoots, from a variety of annual or perennial plants, and includes globe artichoke (the immature flowerhead) of the family *Compositae*. Examples include witloof chicory (sprouts), artichoke- globe, asparagus, bamboo shoots, cardoon, celery, celtuce, palm hearts, rhubarb; and

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

## 2. General Provisions

(1) (a) For the purpose of section 2(1)(b)(i) of the Act, foodstuff listed in column II of Table 1 of Annexure A is hereby deemed to be contaminated, impure, or is deemed to be harmful or injurious to human health, if it contains the metal in column I in amounts exceeding the corresponding level in column III when measured using accredited analytical methods.

(b) Other internationally ratified methods can be used as alternative or complementary methods, provided that their implementation provides an equivalent level of public health protection.

(2) A person may not sell a foodstuff with levels that exceed the maximum level of metals prescribed by these Regulations, unless stipulated otherwise in other relevant regulations.

(3) The foodstuffs listed in column II of Annexure A shall include foodstuff as defined in the relevant Codex commodity standards or the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008), Marine Living Resources Act 1998 (Act No 18 of 1998), the Agricultural Products Standards Act, 119 (Act 119 of 1990) and the applicable Regulations. unless otherwise specified.

### **3. Repeal**

(1) These Regulations repeal the following Regulations on the day that these Regulations come into operation:

- (a) The Regulations Relating to Maximum Levels of Metals in Foodstuffs published under Government Notice No. R. 500 of 30 April 2004, as amended by Government Notice No. R. 545 of 23 May 2008, and
- (b) The Regulations Regarding Food and Water Vessels published under Government Notice No. 1575 of 10 September 1971.

### **4. Commencement**

(1) These Regulations shall come into operation three months after the date of publication.

## ANNEXURE A

Table 1: Maximum Levels for Metals in Foodstuffs

Metal	Foodstuff	ML (mg/kg or mg/l)
Arsenic, Total (As-tot)	Edible fats and oils	0.10
	Fat spreads and blended spreads	0.10
	Natural mineral water	0.01
	Salt, food grade	0.50
	Rice, husked*	0.35
	Rice, polished shed *	0.20
Arsenic, Inorganic (As-in)	Rice, polished (*Follow up analysis if the As-tot exceed the ML)	0.20
	Rice, husked (*Follow up analysis if the As-tot exceed the ML)	0.35
Cadmium (Cd)	Brassica vegetables	0.05
	Bulb vegetables	0.05
	Fruiting vegetables (Excluding tomatoes & edible fungi)	0.05
	Leafy vegetables	0.2
	Legume vegetables	0.1
	Pulses (Excluding soya bean (dry))	0.1
	Root and tuber vegetables ( Excluding celeriac)	0.1

Metal	Foodstuff	ML (mg/kg or mg/l)
	Stalk and stem vegetables	0.1
	Cereal grains (Excluding buckwheat, canihua, quinoa, wheat & rice)	0.1
	Wheat (wheat, durum wheat, spelt and emmer)	0.2
	Rice, polished	0.4
	Marine bivalve molluscs - Clams, cockles and mussels (Excluding oysters and scallops. Without viscera & shell)	2.0
	Cephalopods -Cuttlefishes, octopuses and squids (Without viscera & shell)	2.0
	Natural mineral water	0.003
	Salt, food grade	0.5
Lead (Pb)	Berries and other small fruits (Excluding cranberry, currant and elderberry)	0.1
	Cranberry, currant and elderberry	0.2
	Fruits, except berries and other small fruits (After removal of stem, cap, stone, crown and/or seeds but calculated on whole fruit)	0.1
	Brassica vegetables	0.1
	Bulb vegetables	0.1
	Fruiting vegetables(Excluding fungi and mushrooms )	0.05
	Leafy vegetables	0.3
	Legume vegetables	0.1

Metal	Foodstuff	ML (mg/kg or mg/l)
Lead (Pb)	Pulses	0.1
	Root and tuber vegetables	0.1
	Canned fruits	0.1
	Jams, jellies and marmalades	0.4
	Mango chutney	1.0
	Canned vegetables (Excluding canned brassica vegetables)	0.1
	Preserved tomatoes	0.05
	Table olives	0.4
	Pickled cucumbers	0.1
	Processed tomato concentrates	1.5
	Fruit juices, nectars and ready-to-drink fruit drinks/juices (Excluding juices and nectars from berries and small fruits and passion fruit juices)	0.03
	Cereal grains( Excluding buckwheat, canihua, & quinoa)	0.2
	Canned chestnuts and canned chestnuts purée	0.05
	Meat and fat of cattle, pigs and sheep (without bones)	0.1
	Meat and fat of poultry(without bones)	0.1
Cattle, Edible offal of	0.5	



Metal	Foodstuff	ML (mg/kg or mg/l)
Lead (Pb)	Pig, Edible offal of	0.5
	Poultry, Edible offal of	0.5
	Fish (whole commodity or portions, without the viscera).	0.3
	Edible fats and oil	0.1
	Fat spreads and blended spreads	0.1
	Natural mineral waters	0.01
	Milk	0.02
	Secondary milk products (Products made from milk)	0.02
	Infant formula, formula for special medical purposes intended for infants and follow-up formula	0.01
	Salt, food grade	2.0
Wine	0.2	
Mercury (Hg)	Natural mineral waters	0.001
	Salt, food grade	0.1
Methylmercury	Fish (whole commodity or portions, without the viscera; Except predatory fish).	0.5
	Predatory fish- Such as shark, swordfish, tuna, pike & others. (Whole commodity or portions, without the viscera).	1.0
Tin (Sn)	Canned foods, excluding beverages (Excluding non-tinplate canned cooked cured chopped meat, cooked ham, cooked cured pork shoulder, corned beef and	250

Metal	Foodstuff	ML (mg/kg or mg/l)
Tin (Sn)	luncheon meat)	
	Canned beverages	150
	Cooked cured chopped meat (Applies to products in containers other than tinfoil containers)	50
	Cooked cured ham (Applies to products in containers other than tinfoil containers)	50
	Cooked cured pork shoulder (Applies to products in containers other than tinfoil containers)	50
	Corned beef (Applies to products in containers other than tinfoil containers)	50
	Luncheon meat (Applies to products in containers other than tinfoil containers)	50