L.N. 343 of 2004

### FOOD SAFETY ACT (CAP. 449)

#### Natural Mineral Waters Regulations, 2004

IN exercise of the powers conferred by article 10 of the Food Safety Act, the Minister of Health, the Elderly and Community Care has made the following regulations:-

1. The title of these regulations is the Natural Mineral Waters Citation and commencement Regulations, 2004.

2. These regulations shall enter into force on the 1<sup>st</sup> July, 2004, provided that:

(a) products which comply with these regulations may be marketed prior to that date;

(b) products packaged and labelled prior to the 1<sup>st</sup> July, 2004 may be sold until stocks are exhausted.

3. These regulations implement the provisions of Council Directive 80/777/EEC on the exploitation and marketing of natural mineral waters, as amended by Council Directive 80/1276/EEC, Council Directive 85/7/EEC, Directive 96/70/EC of the European Parliament and of the Council, Regulation (EC) No 1882/2003 of the European Parliament and of the Council, and Commission Directive 2003/40/ EC.

> These regulations concern waters extracted from the ground Scope and applicability

4.1 of a Member State of the European Community and recognized by the responsible authority of that Member State as natural mineral waters satisfying the provisions of Section I of the First Schedule.

4.2 These regulations also concern waters extracted from the ground of a third country, imported into the European Community and recognized as natural mineral waters by the responsible authority of a Member State.

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Recognition of

mineral waters.

4.3 These regulations shall not apply to:

(a) to waters which are medicinal products, as defined in the Medicines Act,

(b) to natural mineral waters used at source for curative purposes in thermal or hydromineral establishments; and

(c) to natural mineral waters intended for export to third countries.

**5.1** The waters referred to in regulation 4.2 may be so recognized only if the responsible authority in the country of extraction has certified that they satisfy Section I of the First Schedule, and that regular checks are made on the application of the provisions of paragraph 2 of the Second Schedule.

5.2 The validity of the certification referred to in regulation 5.1 shall be for a period of five years. It shall not be necessary to repeat the recognition procedure referred to in regulation 4.2 if the certification is renewed before the end of the said period.

5.3 The grounds for granting the recognition referred to in regulations 4.1 and 4.2 shall be stated in due form by the responsible authority and shall be officially published in the Gazette.

5.4 The responsible authority shall inform the European Commission of the cases where the recognition referred to in regulations 4.1 and 4.2 had been granted or withdrawn.

**6.** Only waters referred to in regulations 4.1 and 4.2 may be marketed as natural mineral waters.

7. Natural mineral water springs may be exploited and their waters bottled only in accordance with the Second Schedule.

**8.1** Natural mineral water, in its state at source, may not be the subject of any treatment other than:

(a) the separation of its unstable elements, such as iron and sulphur compounds, by filtration or decanting, possibly preceded by oxygenation, in so far as this treatment does not alter the composition of the water as regards the essential constituents which give it its properties;

Marketing of natural mineral waters.

Exploitation of natural mineral waters.

Authorised treatments.

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(b) the separation of iron, manganese and sulphur compounds and arsenic from certain natural mineral waters by treatment with ozone-enriched air in so far as such treatment does not alter the composition of the water as regards the essential constituents which give it its properties, and provided that:

(i) the treatment complies with any conditions for use which may be laid down in accordance with the procedure laid down in Article 12 of Council Directive 80/777/EEC,

the treatment is notified to, and specifically (ii) controlled by, the competent authorities;

the separation of undesirable constituents other than (c) those specified in (a) or (b), in so far as this treatment does not alter the composition of the water as regards the essential constituents which give it its properties, and provided that:

the treatment complies with the conditions for use (i) to be laid down in accordance with the procedure laid down in Article 12 of Council Directive 80/777/EEC,

the treatment is notified to, and specifically (ii) controlled by, the competent authorities;

the total or partial elimination of free carbon dioxide (d) by exclusively physical methods.

8.2 Natural mineral water, in its state at source, may not be the subject of any addition other than the introduction or the reintroduction of carbon dioxide under the conditions laid down in Section III of the First Schedule.

8.3 In particular, any disinfection treatment by whatever means and, subject to regulation 8.2, the addition of bacteriostatic elements or any other treatment likely to change the viable colony count of the natural mineral water shall be prohibited.

Regulation 8.1 shall not constitute a bar to the utilization of 8.4 natural mineral waters and spring waters in the manufacture of soft drinks.

parameters.

9.1 The revivable total colony count of a natural mineral water Microbiological at source shall conform to its normal viable colony count and give satisfactory evidence of the protection of the source against all contamination. This total colony count shall be determined under the conditions laid down in Section II of the First Schedule, point 1.3.3.

9.1.1 After bottling, the total colony count at source may not exceed 100 per millilitre at 20 to 22  $\[mathbb{C}\]$  in 72 hours on agaragar or an agar-gelatine mixture and 20 per millilitre at 37  $\[mathbb{C}\]$  in 24 hours on agar-agar. The total colony count shall be measured within the 12 hours following bottling, the water being maintained at 4  $\[mathbb{C}\] \pm 1 \[mathbb{C}\]$  during this 12-hour period.

9.1.2 At source, these values should not normally exceed 20 per millilitre at 20 to 22 f in 72 hours and 5 per millilitre at 37 f in 24 hours respectively, on the understanding that they are to be considered as guide figures and not as maximum permitted concentrations.

9.2 At source and during its marketing, a natural mineral water shall be free from:

(a) parasites and pathogenic micro-organisms;

(b) *Escherichia coli* and other coliforms and faecal streptococci in any 250 ml sample examined;

(c) sporulated sulphite-reducing anaerobes in any 50 ml sample examined;

(d) *Pseudomonas aeruginosa* in any 250 ml sample examined.

9.3 Without prejudice to regulations 9.1 and 9.2 and the conditions of exploitation laid down in the Second Schedule, at the marketing stage:

(a) the revivable total colony count of a natural mineral water may only be that resulting from the normal increase in the bacteria content which it had at source,

(b) the natural mineral water may not contain any organoleptic defects.

Closures.

**10.** Any container used for packaging natural mineral waters shall be fitted with closures designed to avoid any possibility of adulteration or contamination.

Sales descriptions and labelling.

**11.1** The sales description of natural mineral waters shall be 'natural mineral water' or, in the case of an effervescent natural mineral water as defined in Section III of the First Schedule, as appropriate, 'naturally carbonated natural mineral water', 'natural mineral water fortified with gas from the spring' or 'carbonated natural mineral water'.

11.1.1 The sales description of natural mineral waters which have undergone any of the treatments referred to in regulation 8.1(d) shall have added to it as appropriate the indication 'fully decarbonated' or 'partially decarbonated'.

11.2 Labels on natural mineral waters shall also give the following mandatory information:

(a) a statement of the analytical composition, giving its characteristic constituents;

(b) the place where the spring is exploited and the name of the spring;

(c) information on any treatments referred to in regulation 8.1(b) and (c).

11.3 The name of a locality, hamlet or place may occur in the wording of a trade description provided that it refers to a natural mineral water the spring of which is exploited at the place indicated by that description and provided that it is not misleading as regards the place of exploitation of the spring.

11.4 It shall be forbidden to market natural mineral water from one and the same spring under more than one trade description.

11.5 When the labels or inscriptions on the containers in which the natural mineral waters are offered for sale include a trade description different from the name of the spring or the place of its exploitation, this place or the name of the spring shall be indicated in letters at least one and a half times the height and width of the largest of the letters used for that trade description.

11.5.1 The first subparagraph shall apply, *mutatis mutandis* and with the same intention as regards the importance attributed to the name of the spring or the place of its exploitation, with regard to the trade description used in advertising, in whatsoever form, relating to natural mineral waters.

11.6 It shall be forbidden, both on packaging or labels and in advertising in whatsoever form, to use designations, proprietary names, trade marks, brand names, illustrations or other signs, whether emblematic or not, which:

(a) in the case of a natural mineral water, suggest a characteristic which the water does not possess, in particular as

regards its origin, the date of the authorization to exploit it, the results of analyses or any similar references to guarantees of authenticity;

(b) in the case of drinking water packaged in containers which does not satisfy the provisions of Section I of the First Schedule, are liable to cause confusion with a natural mineral water, in particular the description 'mineral water'.

11.7 All indications attributing to natural mineral water properties relating to the prevention, treatment or cure of a human illness shall be prohibited.

11.7.1 However, the indications listed in the Third Schedule to these regulations shall be authorized if they meet the relevant criteria laid down in that Schedule or, in the absence thereof, criteria laid down in national provisions and provided that they have been drawn up on the basis of physico-chemical analyses and, where necessary, pharmacological, physiological and clinical examinations carried out according to recognized scientific methods, in accordance with Section I, paragraph 2 of the First Schedule.

11.7.2 The indications 'stimulates digestion', 'may facilitate the hepato-biliary functions' or similar indications are authorized. The Food Safety Commission may also authorize the inclusion of other indications, provided that the latter do not conflict with the principles stated in regulation 11.7 and are compatible with those stated in subregulation 11.7.1.

11.8 The term 'spring water' shall be reserved for a water which is intended for human consumption in its natural state, and bottled at source, which:

(a) satisfies the conditions of exploitation laid down in the Second Schedule, paragraphs 2 and 3, which shall be fully applicable to spring waters,

(b) satisfies the microbiological requirements laid down in regulation 9,

(c) satisfies the labelling requirements of regulation 11.2(b) and (c) and regulations 11.3 to 11.5,

(d) has not undergone any treatment other than those referred to in regulation 8.

In addition, spring waters shall comply with other provisions relating to the quality of water intended for human consumption.

**12.1** Where the Food Safety Commission has detailed grounds Temporary for considering that a natural mineral water does not comply with the restrictions on marketing. provisions laid down in these regulations, or endangers public health, albeit freely circulating in one or more Member States, it may temporarily restrict or suspend trade in that product within Malta. It shall immediately inform the European Commission and the other Member States thereof and give reasons for its decision.

12.2 At the request of any Member State or the European Commission, the Food Safety Commission shall provide all relevant information concerning recognition of the water, together with the results of the regular checks.

13.1 By the 1<sup>st</sup> January, 2006 at the latest, natural mineral waters Maximum shall, at the time of packaging, comply with the maximum concentration limits. limits set out in the Fourth Schedule for the constituents listed in that Schedule.

13.2 However, in the case of fluorides and nickel, the deadline referred to above is extended until the 1<sup>st</sup> January, 2008.

14. For the purposes of official controls, the specifications listed Specifications for in the Fifth Schedule for analysing the constituents listed in the Fourth Schedule shall apply.

15.1 Natural mineral waters with a fluoride concentration Waters containing fluoride. exceeding 1.5 mg/l shall bear on the label the words 'contains more than 1.5 mg/l of fluoride: not suitable for regular consumption by infants and children under 7 years of age'.

15.2 The label information laid down in regulation 15.1 shall be placed in immediate proximity to the trade name and in clearly visible characters.

15.3 Natural mineral waters which, under the terms of regulation 15.1, bear label information, shall indicate the actual fluoride content in relation to the physico-chemical composition in terms of essential constituents, as laid down in regulation 11.2.

**16.1** Without prejudice to the provisions of regulation 8.1(b), Treatment with application of the treatment of natural mineral waters with ozoneenriched air must be notified in advance to the responsible authority, which shall ensure that:

official controls.

ozone-enriched air.

(a) use of such treatment is justified by the composition of the water in terms of compounds of iron, manganese, sulphur and arsenic;

(b) the operator takes all measures necessary to guarantee that the treatment is effective and safe and to allow it to be checked by the responsible authority.

16.2 Ozone-enriched air treatment of natural mineral waters must comply with all the following conditions:

(a) the physico-chemical composition of the natural mineral waters in terms of essential constituents shall not be modified by the treatment;

(b) the natural mineral water before treatment must comply with the microbiological criteria laid down in regulations 9.1 and 9.2;

(c) the treatment shall not lead to the formation of residues with a concentration exceeding the maximum limits laid down in the Sixth Schedule or residues which could pose a risk to public health.

16.3 Pursuant to regulation 11.2(c), the labelling of natural mineral waters which have been treated with ozone-enriched air shall bear, in proximity to the analytical composition of characteristic constituents, the words 'water subjected to an authorised ozone-enriched air oxidation technique'.

16.4 The provisions of this regulation shall apply to spring waters.

Designation of responsible authority.

**17.** The Directorate responsible for foodstuffs within the Malta Standards Authority is designated as the responsible authority for the recognition of natural mineral waters.

#### FIRST SCHEDULE

#### I. DEFINITION

1. 'Natural mineral water' means microbiologically wholesome water, within the meaning of regulation 9, originating in an underground water table or deposit and emerging from a spring tapped at one or more natural or bore exits.

Natural mineral water can be clearly distinguished from ordinary drinking water:

- (a) by its nature, which is characterized by its mineral content, trace elements
  - or other constituents and, where appropriate, by certain effects;
- (b) by its original state,

both characteristics having been preserved intact because of the underground origin of such water, which has been protected from all risk of pollution.

- 2. These characteristics, which may give natural mineral water properties favourable to health, must have been assessed:
  - (a) from the following points of view:
    - 1. geological and hydrological,
    - 2. physical, chemical and physico-chemical,
    - 3. microbiological,
    - 4. if necessary, pharmacological, physiological and clinical;
  - (b) according to the criteria listed in Section II;
  - (c) according to scientific methods approved by the responsible authority.

The analyses referred to in (a) (4) may be optional where the water presents the compositional characteristics on the strength of which it was considered a natural mineral water in the Member State of origin prior to the entry into force of Directive 80/777/EEC. This is the case in particular when the water in question contains, per kg, both at source and after bottling, a minimum of 1 000 mg of total solids in solution or a minimum of 250 mg of free carbon dioxide.

3. The composition, temperature and other essential characteristics of natural mineral water must remain stable within the limits of natural fluctuation; in particular, they must not be affected by possible variations in the rate of flow.

Within the meaning of regulation 9.1, the normal viable colony count of natural mineral water means the reasonably constant total colony count at source before any treatment, whose qualitative and quantitative composition taken into account in the recognition of that water is checked by periodic analysis.

### II. REQUIREMENTS AND CRITERIA FOR APPLYING THE DEFINITION

#### 1.1. Requirements for geological and hydrological surveys

There must be a requirement to supply the following particulars:

- 1.1.1. the exact site of the catchment with indication of its altitude, on a map with scale of not more than 1 : 1000;
- 1.1.2. a detailed geological report on the origin and nature of the terrain;
- 1.1.3. the stratigraphy of the hydrogeological layer;
- 1.1.4. a description of the catchment operations;
- 1.1.5. the demarcation of the area or details of other measures protecting the spring against pollution.

# 1.2. Requirements for physical, chemical and physico-chemical surveys

These surveys shall establish:

- 1.2.1. the rate of flow of the spring;
- 1.2.2. the temperature of the water at source and the ambient temperature;
- 1.2.3. the relationship between the nature of the terrain and the nature and type of minerals in the water;
- 1.2.4. the dry residues at 180 °C and 260 °C;
- 1.2.5. the electrical conductivity or resistivity, with the measurement temperature having to be specified;
- 1.2.6. the hydrogen ion concentration (pH);
- 1.2.7. the anions and cations;
- 1.2.8. the non-ionized elements;
- 1.2.9. the trace elements;
- 1.2.10. the radio-actinological properties at source;
- 1.2.11. where appropriate, the relative isotope levels of the constituent elements of water, oxygen (160 180) and hydrogen (protium, deuterium, tritium);
- 1.2.12. the toxicity of certain constituent elements of the water, taking account of the limits laid down for each of them.

# 1.3. Criteria for microbiological analyses at source

These analyses must include:

- 1.3.1. demonstration of the absence of parasites and pathogenic micro-organisms;
- 1.3.2. quantitative determination of the revivable colony count indicative of faecal contamination:
  - (a) absence of Escherichia coli and other coliforms in 250 ml at 37 °C and 44.5 °C;
  - (b) absence of faecal streptococci in 250 ml;
  - (c) absence of sporulated sulphite-reducing anaerobes in 50 ml;
  - (d) absence of Pseudomonas aeruginosa in 250 ml.

# 1.3.3. determination of the revivable total colony count per ml of water:

- (i) at 20 to 22 °C in 72 hours on agar-agar or an agar-gelatine mixture,
  - (ii) at 37 °C in 24 hours on agar-agar.

#### 1.4. Requirements for clinical and pharmacological analyses

- 1.4.1. The analyses, which must be carried out in accordance with scientifically recognized methods, should be suited to the particular characteristics of the natural mineral water and its effects on the human organism, suchas diuresis, gastric and intestinal functions, compensation for mineral deficiencies.
- 1.4.2. The establishment of the consistency and concordance of a substantial number of clinical observations may, if appropriate, take the place of the analyses referred to in 1.4.1. Clinical analyses may, in appropriate cases, take the place of the analyses referred to in 1.4.1 provided that the consistency and concordance of a substantial number of observations enable the same results to be obtained.

# III. SUPPLEMENTARY QUALIFICATIONS RELATING TO EFFERVESCENT NATURAL MINERAL WATERS

At source or after bottling, effervescent natural mineral waters give off carbon dioxide spontaneously and in a clearly visible manner under normal conditions of temperature and pressure. They fall into three categories to which the following descriptions respectively shall apply:

- (a) 'naturally carbonated natural mineral water' means water whose content of carbon dioxide from the spring after decanting, if any, and bottling is the same as at source, taking into account where appropriate the reintroduction of a quantity of carbon dioxide from the same water table or deposit equivalent to that released in the course of those operations and subject to the usual technical tolerances;
- (b) 'natural mineral water fortified withgas from the spring' means water whose content of carbon dioxide from the water table or deposit after decanting, if any, and bottling is greater than that established at source;
- (c) 'carbonated natural mineral water' means water to which has been added carbon dioxide of an origin other than the water table or deposit from which the water comes.

#### SECOND SCHEDULE

# CONDITIONS FOR THE EXPLOITATION AND MARKETING OF NATURAL MINERAL WATER

- 1. Exploitation of a natural mineral water spring shall be subject to permission from the responsible authority of the country where the water has been extracted, after it has been established that the water in question complies with the provisions laid down in point 1 of the First Schedule.
- 2. Equipment for exploiting the water must be so installed as to avoid any possibility of contamination and to preserve the properties, corresponding to those ascribed to it, which the water possesses at source. To this end, in particular:

  - the spring or outlet must be protected against the risks of pollution; (a)
  - (b) the catchment, pipes and reservoirs must be of materials suitable for water and so built as to prevent any chemical, physico-chemical or microbiological alteration of the water;
  - the conditions of exploitation, particularly the washing and bottling plant, (c) must meet hygiene requirements. In particular, the containers must be so treated or manufactured as to avoid adverse effects on the microbiological and chemical characteristics of the natural mineral water;
  - the transport of natural mineral water in containers other than those (d) authorized for distribution to the ultimate consumer is prohibited.

However, point (d) need not be applied to mineral waters exploited and marketed in the territory of a Member State if, in that Member State at the time of notification of Council Directive 80/777/EEC, transport of the natural mineral water in tanks from the spring to the bottling plant was authorized.

- 3. Where it is found during exploitation that the natural mineral water is polluted and no longer presents the microbiological characteristics laid down in regulation 9, the person exploiting the spring must forthwith suspend all operations, particularly the bottling process, until the cause of pollution is eradicated and the water complies with the provisions of regulation 9.
- 4. The responsible authority in the country of origin shall carry out periodic checks to see whether:
  - (a) the natural mineral water in respect of which exploitation of the spring has been authorized complies with Section I of the First Schedule;
  - the provisions of paragraphs 2 and 3 are being applied by the person (b) exploiting the spring.

# THIRD SCHEDULE

# Indications and Criteria laid down in regulation 11.7

| Indications                                 | Criteria   |
|---|--|
| Low mineral content                         | Mineral salt content, calculated as a fixed residue, not greater than 500 mg/l |
| Very low mineral content                    | Mineral salt content, calculated as a fixed residue, not greater than 50 mg/l  |
| Rich in mineral salts                       | Mineral salt content, calculated as a fixed residue, greater than 1500 mg/l    |
| Contains bicarbonate                        | Bicarbonate content greater than 600 mg/l                                      |
| Contains sulphate                           | Sulphate content greater than 200 mg/l   |
| Contains chloride                           | Chloride content greater than 200 mg/l   |
| Contains calcium                            | Calcium content greater than 150 mg/l  |
| Contains magnesium                          | Magnesium content greater than 50 mg/l   |
| Contains fluoride                           | Fluoride content greater than 1 mg/l   |
| Contains iron                               | Bivalent iron content greater than 1 mg/l                                      |
| Acidic                                      | Free carbon dioxide content greater than 250 mg/l                              |
| Contains sodium                             | Sodium content greater than 200 mg/l   |
| Suitable for the preparation of infant food | -  |
| Suitable for a low-sodium diet              | Sodium content less than 20 mg/l   |
| May be laxative                             | -  |
| May be diuretic                             | -  |

# FOURTH SCHEDULE

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# Constituents naturally present in natural mineral waters and maximum limits which, if exceeded, may pose a risk to human health

| Constituents | Maximum limits   |
|--------------|------------------|
|              | (mg/l)           |
| Antimony     | 0.0050           |
| Arsenic      | 0.010 (as total) |
| Barium       | 1.0              |
| Cadmium      | 0.003            |
| Chromium     | 0.050            |
| Copper       | 1.0              |
| Cyanide      | 0.070            |
| Fluorides    | 5.0              |
| Lead         | 0.010            |
| Manganese    | 0.50             |
| Mercury      | 0.0010           |
| Nickel       | 0.020            |
| Nitrates     | 50               |
| Nitrites     | 0.1              |
| Selenium     | 0.010            |

#### FIFTH SCHEDULE

#### Detection Notes Constituents Accuracy of Precision of Limit in % of parametric parametric value in % value parametric (Note 2) value (Note 1) (Note 3) 25 25 25 Antimony Arsenic 10 10 10 25 25 25 Barium 10 10 10 Cadmium 10 10 Chromium 10 10 10 10 Copper Cyanides 10 10 10 Note 4 Fluorides 10 10 10 10 10 10 Lead 10 10 10 Manganese 20 10 20 Mercury 10 Nickel 10 10 10 10 10 Nitrates 10 10 10 Nitrites Selenium 10 10 10

#### Performance characteristics (1) for analysing the constituents in the First Schedule

<sup>&</sup>lt;sup>1</sup> Analytical methods for measuring concentrations of the constituents listed in the First Schedule must be able to measure, as a minimum, concentrations equal to the parametric value with a specified accuracy, precision and detection limit. Whatever the sensitivity of the method of analysis used, the result will be expressed using at least the same number of decimal places as for the maximum limit laid down in the First Schedule.

Note 1: accuracy is the systematic error and is the difference between the average value of a large number of repeated measurements and the exact value.

*Note 2:* precision is the random error and is expressed in general as the standard deviation (within a batch and between batches) of a sample of results from the average. Acceptable precision is equal to twice the relative standard deviation. *Note 3:* the detection limit is:

<sup>-</sup> either three times the relative standard deviation within a batch of a natural sample containing a low concentration of the parameter,

<sup>-</sup> or five times the relative standard deviation within a batch of a virgin sample.

Note 4: the method should make it possible to determine total cyanide in all its forms.

# SIXTH SCHEDULE

# Maximum limits for residues from treatment of natural mineral waters and spring waters by ozone-enriched air

| Treatment residue | Maximum limit (²)<br>(µg/l) |
|-------------------|-----------------------------|
| Dissolved ozone   | 50                          |
| Bromates          | 3 .                         |
| Bromoforms        | 1                           |

 $<sup>^2</sup>$  Compliance with the maximum limits is monitored by the competent authorities at the time of bottling or other form of packaging intended for the final consumer.