

## **BHUTAN STANDARD FOR NATURAL MINERAL WATER**

### **1. SCOPE**

This standard applies to all packaged natural mineral water sold as food and is based on the Codex Standard for Natural Mineral Waters (CX STAN 108-1981).

### **2. DEFINITION**

Natural Mineral Water is water that is clearly distinguished from ordinary drinking water and is characterized by the following:

- a. The content of certain mineral salts and their relative proportions and the presence of trace elements or of other constituents
- b. It is obtained directly from natural or drilled sources from underground water bearing strata
- c. The constancy of its composition and the stability of its discharge
- d. It is collected under conditions which guarantee the original microbiological purity and chemical composition of essential components
- e. It is packaged at or close to the point of emergence
- f. It is not subject to any treatment other than those permitted under this standard

### **3. COMPOSITION AND OTHER QUALITY FACTORS**

#### **3.1 Treatment and handling**

3.1.1 Treatments permitted under this standard include separation from unstable constituents such as compounds containing iron, manganese, sulphur or arsenic, by decantation and/or filtration, if necessary, accelerated by previous aeration.

3.1.2 The transport of natural mineral water in bulk containers for packaging is not permitted under this standard.

#### **3.2 Compositional/health related limits for certain substances**

3.2.1 The health related limits for certain substances shall be in accordance with the permission of section 3.2 of the Codex Standard for Natural Mineral Waters (Codex Standard 108-1981) which are as set out below:

a. Antimony	0.005 mg/l
b. Arsenic	0.01 mg/l, calculated as total As
c. Barium	0.7 mg/l <sup>1</sup>
d. Borate	5 mg/l, calculated as B
e. Cadmium	0.003 mg/l
f. Chromium	0.05 mg/l, calculated as total Cr
g. Copper	1 mg/l
h. Cyanide	0.07 mg/l

i. Fluoride	See section 6.3.2 (CX STAN 108-1981)
j. Lead	0.01 mg/l
k. Manganese	0.4 mg/l
l. Mercury	0.001 mg/l
m. Nickel	0.02 mg/l
n. Nitrate	50 mg/l, calculated as nitrate
o. Nitrite	0.1 mg/l as nitrite
p. Selenium	0.01 mg/l

3.2.2 The following substances shall be below the limit of quantification when tested, in accordance with the methods prescribed in Section 7 of the Codex Standard for Natural Mineral Waters (CODEX STAN 108-1981):

- a. Surface active agents
- b. Pesticides and PCBs
- c. Mineral oil
- d. Polynuclear aromatic hydrocarbons

#### **4. HYGIENE**

Natural Mineral Waters covered by this standard shall be prepared in accordance with the following:

- a. The Food Rules and Regulations of Bhutan 2007
- b. The Bhutan Standard for Food Hygiene
- c. The Codex Code of Practice-General Principles of Food Hygiene(CAC/RCP 1-1969)
- d. The Codex Code of Practice for the collecting, processing and marketing of Natural Mineral Waters(CAC RCP 33-1985)

#### **5. PACKAGING**

All natural mineral waters shall be packed in hermetically sealed containers to prevent possible adulteration or contamination.

#### **6. LABELLING**

Natural Mineral Waters shall be labelled in accordance with the provisions of the Bhutan Standard for Labelling of Prepackaged Foods.