

IS 13428 : 2024

from another origin.

NOTE — Mineral water means natural mineral water as defined in [3.1](#).

3.1.6 Natural Spring Water — Natural spring water is natural mineral water which is derived from an underground formation from which water flows naturally to the surface of the earth at an identified location. Spring water shall be collected only at the spring or through a borehole tapping the underground formation feeding the spring. There shall be a natural force causing the water to flow to the surface through an orifice.

3.2 Packaged Natural Mineral Water — Natural mineral water filled into hermetically sealed containers of various compositions, forms and capacities that is, suitable for direct consumption without further treatment.

4 TREATMENT AND HANDLING

4.1 Treatments permitted include separation from unstable constituents, such as compounds containing iron, manganese, sulphur or arsenic, by decantation and/or simple filtration up to 0.5 microns, if necessary, accelerated by previous aeration.

4.2 The treatments provided in [3.1.1](#) to [3.1.5](#) and [4.1](#) above may only be carried out on condition that the mineral content of the water is not modified in its essential constituents, which give the water its properties.

4.3 The transport of natural mineral waters in bulk containers for packaging or for any other process before packaging is prohibited.

5 HYGIENIC CONDITIONS

Natural mineral water shall be collected, processed, handled, packaged and marketed in accordance with the hygienic practices given in [Annex B](#). A checklist for good hygienic practices and food safety system for packaged natural mineral water processing units given at the end of [Annex B](#).

6 REQUIREMENTS

6.1 Microbiological Requirements

6.1.1 *Escherichia coli* or thermotolerant bacteria, shall be absent in any 250 ml sample when tested in accordance with the method given in IS 15185.

6.1.2 *Coliform*, bacteria shall be absent in any

250 ml sample when tested in accordance with the method given in IS 5401 (Part 1) or IS 15185*.

6.1.3 *Faecal streptococci* and *Staphylococcus aureus*, shall be absent in any 250 ml sample when tested in accordance with the method given in IS 5887 (Part 2). *Streptococci (Enterococci)* may also be tested by the method specified in IS 15186*.

6.1.4 *Sulphite Reducing Anaerobe*, shall be absent in 50 ml sample when tested in accordance with the method given in [Annex C](#).

6.1.5 *Pseudomonas aeruginosa*, shall be absent in 250 ml sample when tested in accordance with the method given in [Annex D*](#) or ISO 16266-2.

6.1.6 *Yeast and Mould*, shall be absent in 250 ml sample when tested in accordance with the method given in 16069 (Part 1) .

6.1.7 *Salmonella* and *Shigella*, shall be absent in any 250 ml sample when tested in accordance with the method given in IS 15187 and IS 5887 (Part 7) respectively.

6.1.8 *Vibrio cholera* and *V. parahaemolyticus*, shall be absent in 250 ml sample when tested in accordance with the method given in IS 5887 (Part 5/Sec 1).

6.1.9 The membrane filtration technique outlined in IS 15188 may be used to pass the sample of water to be tested through membrane before the microbiological tests specified from [6.1.1](#) to [6.1.8](#) are carried out.

NOTE — In case of dispute, the method indicated by '*' in [6.1.2](#) to [6.1.3](#) shall be the referee method.

6.2 Natural mineral water shall also comply with the requirements given in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#).

6.3 Residues of pesticides for pesticides as given in [Annex N](#) shall be below the detectable limits. The analysis of pesticide shall be conducted by a recognized laboratory using internationally established test methods as given in [Annex N](#).

6.4 Natural spring water (*see* [3.1.6](#)) shall comply with the requirements given in this standard as specified in [6.1](#), [6.2](#) and [6.3](#), except total dissolved solids (TDS) content. TDS of natural spring water shall be not more than 750 mg/l.