

भारतीय मानक ब्यूरो /BUREAU OF INDIAN STANDARDS
(पूर्वी क्षेत्रीय प्रयोगशाला)/Eastern Regional Laboratory

हमारा संदर्भ/Our Ref: ERL/MICRO/14543

DATE:-20.12.2023

विषय / Subject: Comment for addition of reference test method for IS 14543: 2016

इस संबंध में प्रस्तावित बदलाव(ओं) पर विचार करने के लिए एफ.ए.डी द्वारा निम्नलिखित टिप्पणियों पर ध्यान दिया जाए:

Sl. No	IS	Standard	प्रस्तावित बदलाव/ Proposed change	वजह/Justification
01.	IS 14543 : 2016	Packaged Drinking Water (Other Than Packaged Natural Mineral Water) - Specification (Second Revision)	<p>5.2.1 <i>Escherichia coli</i> (or thermotolerant bacteria) shall be absent in any 250 ml sample when tested in accordance with the method given in IS 15185.²⁾</p> <p>5.2.2 Coliform, bacteria shall be absent in any 250 ml sample when tested in accordance with the method given in IS 5401 (Part 1)^{1) 2)} (see Note) or IS 15185.²⁾</p> <p>NOTE – In case of dispute, the method indicated in IS 5401 (Part 1) shall be the reference method.</p> <p>5.2.3 Faecal Streptococci and <i>Staphylococcus aureus</i>, shall be absent in any 250 ml sample when tested in accordance with the method given in IS 5887(Part 2)¹⁾²⁾. Faecal Streptococci (Enterococci) may also be tested by the method specified in IS 15186.²⁾</p> <p>NOTE – In case of dispute, the method indicated in IS 5887 (Part 2) shall be the reference method.</p> <p>5.2.4 Sulphite Reducing Anaerobes, shall be absent in 50 ml sample when tested in accordance with the method given in Annex C of IS 13428.²⁾</p> <p>5.2.5 <i>Pseudomonas aeruginosa</i>, shall be absent in 250 ml sample when tested in accordance with the method given in Annex D of IS 13428.²⁾</p> <p>5.2.6 Aerobic Microbial Count</p> <p>The total viable colony count shall not exceed 100/ml at 20 to 22°C in 72 h and 20/ ml at 37 ± 1oC in 24 h when tested in accordance with the methods given in IS 5402.²⁾</p> <p>5.2.7 Yeast and mould shall be absent in 250 ml sample when tested in accordance with the method given in IS 5403 (see Note under 5.2.9).^{1) 2)}</p>	<p>In the existing standard it is mentioned as “In case of dispute, the method indicated in IS 5887 (Part 1) shall be the reference method.”</p> <p>Whereas 5887 (Part 1) is for detection of <i>E. coli</i></p> <p>Recently FAD has communicated two methods, namely ISO 16266 – 2:2018 Water quality – Detection and enumeration of <i>Pseudomonas aeruginosa</i>- Part 2: Most Probable number method and ISO 6461/2-1986 (E) Water</p>

5.2.8 Salmonella and Shigella, shall be absent in 250 ml sample when tested in accordance with the method given in IS 15187 ¹⁾ and IS 5887 (Part 7) ¹⁾²⁾

5.2.9 *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) ¹⁾²⁾

NOTES

1. 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 5.2.1 to 5.2.5 and 5.2.7 to 5.2.9 are carried out.
2. Approved international standard test methods from organizations like ISO/APHA/ASTM/AOAC/EPA/EN may also be followed.

quality- Detection and enumeration of sulfite reducing anaerobes (clostridia)- Part 2: Method by membrane filtration.

There are numerous International test methods like ISO/APHA/ASTM/AOAC/EPA/EN test methods for microbiological analysis. Hence Note 2 may be incorporated as similar provisions are there for International Standard test method for chemical analysis(Refer Note 1 of Table 2 as well as Note 1 of Table 3 of IS 14543:2016)

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Also send a copy to LAD/LRMD.

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