PP3035 COLOREX™ VIBRIO

Vibrio parahaemolyticus, Vibrio cholerae and Vibrio vulnificus are all pathogenic bacteria capable of causing serious food poisoning, usually through the consumption of contaminated seafood or non-acid fruit produce. V.alginolyticus, although less common, has been implicated in significant production losses for oyster producers so rapid identification of contamination can help producers prevent the spread to other production sites.



Typically, laboratory diagnostic methods follow the requirements of ISO 21872-1:2007 and *V.parahaemolyticus* & *V.cholerae* are detected using Alkaline peptone water (pre-enrichment step) and Thiosulfate Citrate Bile Salts (TCBS) Agar.⁽¹⁾

ColorexTM Vibrio is a highly selective, chromogenic medium designed to facilitate the detection of *V.cholerae* and *V.parahaemolyticus* in food and environmental samples.⁽²⁾ Studies have shown that ColorexTM Vibrio medium allows for a more sensitive detection method (88%) compared to TCBS agar (51%).⁽³⁾ The distinct colour of the colonies allows for the easy visual assessment of the sample results. Samples may be plated directly to the medium or after pre-enrichment in a suitable enrichment medium e.g. Alkaline peptone water.

V.parahaemolyticus – Mauve colonies V.cholerae / V.vulnificus – Pale blue to turquoise blue colonies V.furnissii / V.alginolyticus – Cream to colourless colonies Enterobacteriaceae – Small colourless colonies / Inhibited Gram +ve bacteria – Inhibited.

- 1SO/TS 21872-1:2007 Microbiology of food and animal feeding stuffs Horizontal method for the detection of potentially enteropathogenic Vibrio spp. Part: Detection of Vibrio parahaemolyticus and Vibrio cholerae.
- (2) Hara-Kudo. N, et al,. App & Environ Microbiol (2001) p. 5819-5823
- Di Pinto. A, et al., Food Control (2010) doi: 10.1016/j.foodcont.2010.06.013

Formula	gm/litre	Properties	
Peptone & Yeast extract	8.0	Appearance	Firm Gel
Salts	51.4	Colour	Straw
Chromogenic mix	0.3	рН	9.0 ± 0.2
Agar	15.0	Storage	2 - 8°C
		Shelf Life	42 days

Quality Control Test Organisms	Ref. No.	Result
Vibrio parahaemolyticus	NCTC 10885	Growth / Mauve Colonies
Vibrio cholerae	NCTC 11348	Growth / Blue Colonies
Vibrio furnissii	NCTC 11218	Growth / Cream Colonies
Escherichia coli	NCTC 12241	Inhibited
Proteus mirabilis	NCTC 10975	Inhibited

Recommended Incubation: Aerobically at 37°C ± 1°C for 18 - 24 hours

