Technical Data Sheet

ReadyTube™ 1000 Buffered Peptone Water acc. ISO 6579, ISO 6887, ISO 21528, FDA-BAM and EP

Ordering number: 1.46403.0006

For the preliminary non-selective enrichment of bacteria, particularly pathogenic Enterobacteriaceae such as Salmonella and Cronobacter, from food and animal feed, water and other materials and as diluent for sample preparation.

This culture medium complies with the specifications given by EN ISO 6579, EN ISO/FDIS 6579-1, ISO 6887, EN ISO 6785 I IDF 93, EN ISO 19250, EN ISO 21528-1, FDA-BAM, APHA and EP.

Mode of Action

The broth is rich in nutrients and produces high resuscitation rates for sublethally injured bacteria and intense growth. The phosphate buffer system prevents bacterial damage caused by changes in the pH of the medium. Peptone including enzymatic digest of casein acts as a source of carbon, nitrogen, vitamins and minerals whilst sodium chloride maintains the osmotic balance.

Typical Composition

Specified by ISO 6579, ISO/FDIS 6579-1, ISO 19250, ISO 21528, ISO 22964		**Specified by FDA-BAM M192**		**Specified by EP 2.6.31, ISO 6785 I IDF 93**		**ReadyTube™ 1000 BPW acc. ISO 6579, ISO 21528, ISO 6887, FDA-BAM and EP**	
Enzymatic Digest of Casein**	10 g/l	Peptone	10 g/l	Peptone	10 g/l	Peptone***	10 g/l
NaCl	5 g/l	NaCl	5 g/l	NaCl	5 g/l	NaCl	5 g/l
Na_2HPO_4 x 12 H_2O	9 g/l	Na_2HPO_4*	3.5 g/l	Na_2HPO_4 x 12 H_2O	9 g/l	Na_2HPO_4 x 12 H_2O	9 g/l
KH_2PO_4	1.5 g/l	KH_2PO_4	1.5 g/l	KH_2PO_4	1.5 g/l	KH_2PO_4	1.5 g/l
Water	1000 ml/l	Water	1000 ml/l	Water	1000 ml/l	Water	n/a
pH at 25 °C	7.0 ± 0.2	pH at 25 °C	7.0 ± 0.2	pH at 25 °C	7.0 ± 0.2	pH at 25 °C	7.0 ± 0.2

* 3.57 g Na_2HPO_4, anhydrous is equivalent to 9 g Na_2HPO_4 x 12 H_2O
** ISO/FDIS 6579-1 specifies: Peptone - for example, enzymatic digest of casein
*** includes Enzymatic Digest of Casein

Application and Interpretation

Depend on the purpose for which the medium is used. Incubate the inoculated broth under aerobic conditions, e.g. acc. to EN ISO 6579 36-38 °C for 16-20 h, acc. to EN ISO/FDIS 6579-1 at 34-38 °C for 16-20 h.

Transfer material from the resulting culture to a selective enrichment culture medium following the method given by the appropriate standard.

According to EN ISO/FDIS 6579-1, it is permissible to store the pre-enriched sample after incubation at 2-8 °C for a maximum of 72 h.

Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +2 °C to +25 °C.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control strains	Incubation	Method of control	Expected results
Productivity	*Salmonella* Typhimurium ATCC14028	16-20 h at 36-38 °C	Quantitative	Good growth, turbid
	Salmonella Enteritidis ATCC 13076			
	Escherichia coli ATCC 8739			
	Escherichia coli ATCC 25922			
Diluent	*Escherichia coli* ATCC 8739	45-60 min at room temp.	Quantitative	+/- 30 % of original count
	Escherichia coli ATCC 25922			
	Staphylococcus aureus ATCC 25923			
EP	*Salmonella* Abony NCTC 6017	20-24 h at 30-35 °C	Semi-Qualitative	Good growth, turbid

Please refer to the actual batch related Certificate of Analysis.

The performance test is in accordance with the current version of EN ISO 11133 and the harmonised method of EP, USP and JP.

Literature

APHA (2015): Compendium of Methods for the Microbiological Examination of Foods. 5th ed. American Public Health Association, Washington, D.C.

Edel, W. and Kampelmacher, E. H. (1973): Comparative studies on the isolation of „sublethally injured" *salmonellae* in nine European laboratories. Bull. WHO **48**: 167-174.

European Directorate for the Quality of Medicines and Healthcare (2014): The European Pharmacopoeia. 8th Ed. Chapter 2.6.31 Microbiological examination of herbal medicinal products for oral use and extracts used in their preparation. Strasbourg, France.

FDA-BAM (2012): Chapter No. 29: *Cronobacter*. U.S. Food and Drug Administration - Bacteriological Analytical Manual.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Salmonella spp.* EN ISO 6579:2002.

ISO International Standardisation Organisation. Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Horizontal method for the detection of *Salmonella spp.* EN ISO/FDIS 6579-1:2015.

ISO International Standardisation Organisation. Milk and milk products - Detection of *Salmonella spp.* EN ISO 6785 I IDF 93:2001.

ISO International Standardisation Organisation. Water quality - Detection of *Salmonella spp.* EN ISO 19250:2010.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs - Horizontal methods for the detection and enumeration of *Enterobacteriaceae* - Part 1: Detection and enumeration by MPN technique with pre-enrichment. EN ISO 21528-1:2004.

ISO International Standardisation Organisation. Milk and milk products -- Detection of *Enterobacter sakazakii*, ISO/TS 22964 I IDF/DRM 210:2006

ISO International Standardisation Organisation. Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media. EN ISO 11133:2014.

Mooijman, K.A. (2012): Culture media for the isolation of *Salmonella*. In: Handbook of Culture Media for Food and Water Microbiology. (Corry, J.E.L., Curtis, G.D.W. and Baird, R.M. eds). pp. 261-286. Royal Society of Chemistry, Cambridge, UK.

Ordering Information

Product	Cat. No.	Pack size	Other pack sizes available
ReadyTube™ 1000 BPW ISO 6579, 6887, 21528	1.46403.0006	6 x 1000 ml	20 x 9 ml, 6 x 225 ml,
GranuCult™ Buffered Peptone Water ISO acc. ISO 6579, ISO 21528, ISO 22964, FDA-BAM and EP	1.07228.0500	500g	5 kg, 25 kg

Lit. No.: MK_PF9454EN