UVM Base

LAB 155

Description
UVM (University of Vermont Medium) Base is a two stage selective enrichment broth for the isolation of *Listeria* from meat products and environmental swabs, and forms the basis of the USDA method. The original method has been modified to replace the second stage broth (UVM II) with Fraser broth LAB164 (McClain & Lee 1989).

Formula	g/litre
Tryptone	5.0
Meat Peptone	5.0
Beef Extract	5.0
Yeast Extract	5.0
Sodium chloride	20.0
Disodium hydrogen phosphate	9.6
Potassium dihydrogen phosphate	1.35
Aesculin	1.0

pH: 7.4 ± 0.2

Appearance: Straw opalescent broth

Method for reconstitution
Weigh 52 grams of powder and add to 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix and sterilise at 121°C for 15 minutes. Cool to 47°C and add 2 vials of UVM I supplement (X155/X555) or UVM II supplement (X156) as required. Mix well and distribute into sterile tubes or bottles.

Inoculation: UVM I – Add 25g sample to 225ml of UVM I and homogenise. UVM II – Subculture 0.1ml of enriched UVM I into 10ml UVM II.

Incubation: UVM I – 30°C aerobically for 24 hrs. Subculture onto selective agars and into UVM II. UVM II – 30°C for 24 and 48 hrs. Subculture onto selective agars at 24 and 48 hrs. Incubate selective agars for 24 and 48 hrs.

Minimum QC organisms: *Listeria* sp. NCIMB 50007
E. coli (inhibition) NCIMB50034

References
McClain D., and Lee W.H. (1989) FSIS method for isolation of L.monocytogenes from processed meat and poultry products. Lab.Comm.No.57, Revised May 24, 1989. US Dept of Agric.FSIS, Microbiol. Div.

Warburton D.W. *et al* (1991) A Canadian comparative study of modified versions of the FDA and USDA methods for the detection of L.monocytogenes. J.Food Protection 54 (9) 669-676.