



Kanamycin Aesculin Azide Agar

(K.A.A. Agar)

LAB 106

Description

A selective isolation and enumeration medium for enterococci (Lancefield group D streptococci) in food. Sodium azide and kanamycin provide the selective inhibition required whilst aesculin and iron salts form an indicator system for the presumptive identification of enterococci. Incubation at 42°C will increase the medium's selectivity.

Typical Formula	g/litre
Tryptone	20.0
Yeast Extract	5.0
Sodium chloride	5.0
Sodium citrate	1.0
Aesculin	1.0
Ferric ammonium citrate	0.5
Sodium azide	0.15
Kanamycin sulphate	0.02
Agar No. 1	10.0

Method for reconstitution

Weigh 43 grams of powder, disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix then sterilise by autoclaving at 121°C for 15 minutes. Cool to 47°C, then dispense into Petri dishes.

Appearance: Pale straw, clear.

pH: 7.0 ± 0.2

Minimum Q.C. organisms: *E. faecalis* WDCM 00087
E. coli (inhibition) WDCM 00013

Storage of Prepared Medium: Plates – up to 7 days at 2-8°C in the dark.

Inoculation: Surface, spread 0.1ml to 0.5ml over entire surface of plate.

Incubation: 37°C or 42°C aerobically for 18-24 hours.

Interpretation: Count all white/grey colonies, approx 2mm diameter, surrounded by a black halo to give presumptive enterococcus/faecal streptococcus count.

References

Mossel, D.A.A., Bijken, P.H.G., Eelderink, I. and van Sprekens, K.A. (1978). Streptococci, edited by Skinner, F. A. and Quesnel, L.B. SAB Symposium Series No. 7 Academic Press, London.