Australian Standard®

Food microbiology

Method 2.13: Examination for specific organisms—Campylobacter

1 SCOPE This Standard sets out reference methods for the detection and enumeration of *Campylobacter jejuni* and *Campylobacter coli* in meat and poultry. Two procedures are described as follows:

(a) A qualitative test using enrichment culture.

(b) A quantitative test using a surface spread technique.

NOTE: A flow diagram of the examination procedures is shown in Appendix A.

2 SAFETY PRECAUTIONS The safety precautions described in AS 2243 shall be observed.

3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
1766 Food microbiology
1766.1.4 Method 1.4: General procedures and techniques—Colony count—Surface spread method
1766.3.1 Method 3.1: Examination of specific products—Meat and meat products other than poultry
1766.3.2 Method 3.2: Examination of specific products—Poultry
1766.5 Method 5: Preparation of media, diluents and reagents
2243 Safety in laboratories

4 CULTURE MEDIA, REAGENTS AND REFERENCE CULTURES

4.1 Media (see AS 1766.5 and Appendix B):

4.1.1 *Blood agar*

4.1.2 *Preston broth*

4.1.3 *Preston agar*

4.1.4 *Skirrow agar*

4.1.5 *Nalidixic acid antimicrobial sensitivity discs, 30 μg*

4.1.6 *Cephalothin antimicrobial sensitivity discs, 30 μg*

4.1.7 *Nutrient broth*

4.1.8 *Wang transport medium*

4.2 Reagents

4.2.1 *Sodium hippurate*, 50 g/L aqueous solution.

4.2.2 *Ninhydrin solution*, 3.5 percent in 1:1 mixture of acetone and butanol.

4.2.3 *Oxidase reagent (Kovacs)*

4.2.4 *Saline solution*, 8.5 g/L aqueous solution

4.3 Reference cultures

4.3.1 *Campylobacter jejuni* NCTC 11351.

4.3.2 *Campylobacter coli* NCTC 11366.

5 APPARATUS

5.1 Blender—capable of producing a homogeneous fine slurry of sample and medium as required in Clause 6.3.1. A stomacher-type blender is preferable.