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**Microbiology of food and animal feeding  
stuffs — Guidelines on preparation and  
production of culture media —**

Part 2:  
**Practical guidelines on performance  
testing of culture media**

AMENDMENT 1: Test microorganisms for  
commonly used culture media

*Microbiologie des aliments — Guide pour la préparation et la production  
des milieux de culture —*

*Partie 2: Guide général pour les essais de performance des milieux de  
culture*

*AMENDEMENT 1: Micro-organismes pour essai recommandés pour les  
milieux de culture les plus usuels*



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Amendment 1 to ISO/TS 11133-2:2003 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

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# Microbiology of food and animal feeding stuffs — Guidelines on preparation and production of culture media —

## Part 2

### Practical guidelines on performance testing of culture media

#### AMENDMENT 1: Test microorganisms for commonly used culture media

Page 1, Clause 2

Add the following entries:

ISO 4831, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of coliforms — Most probable number technique*

ISO 4832, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*

ISO 4833, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of microorganisms — Colony-count technique at 30 °C*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.*

ISO 6887-1, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions*

ISO 6887-2, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 2: Specific rules for the preparation of meat and meat products*

ISO 6887-3, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 3: Specific rules for the preparation of fish and fishery products*

ISO 6887-4, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 4: Specific rules for the preparation of products other than milk and milk products, meat and meat products, and fish and fishery products*

ISO 6887-5, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 5: Specific rules for the preparation of milk and milk products*

ISO 6888-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium*

ISO 6888-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 2: Technique using rabbit plasma fibrinogen agar medium*

ISO 6888-3, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 3: Detection and MPN technique for low numbers*

ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique*

ISO 7932, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of presumptive Bacillus cereus — Colony-count technique at 30 °C*

ISO 7937, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colony-count technique*

ISO 10272-1, *Microbiology of food and animal feeding stuffs — Horizontal method for detection and enumeration of Campylobacter spp. — Part 1: Detection method*

ISO/TS 10272-2, *Microbiology of food and animal feeding stuffs — Horizontal method for detection and enumeration of Campylobacter spp. — Part 2: Colony count technique*

ISO/TS 10272-3, *Microbiology of food and animal feeding stuffs — Horizontal method for detection and enumeration of Campylobacter spp. — Part 3: Semi-quantitative method*

ISO 10273, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of presumptive pathogenic Yersinia enterocolitica*

ISO 11290-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes — Part 1: Detection method*

ISO 11290-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes — Part 2: Enumeration method*

ISO 15213, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions*

ISO 15214, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of mesophilic lactic acid bacteria — Colony-count technique at 30° C*

ISO 16649 (all parts), *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli*

ISO 16654, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Escherichia coli O157*

ISO 21528-1, *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*

ISO 21528-2, *Microbiology of food and animal feeding stuffs — Horizontal methods for the detection and enumeration of Enterobacteriaceae — Part 2: Colony-count method*

Replace the whole of Annex B by the following text.

## **Annex B** (normative)

### **Test microorganisms for commonly used culture media (giving information on the culture medium, culture conditions, test microorganisms, culture collection number of test organisms and the expected reactions)**

Tables B.1 to B.6 have been established taking into account the control strains used in the European Pharmacopoeia (EP) and the recommendations from the EP on food microbiology for culture media [Working Party of the International Committee on Food Microbiology and Hygiene (ICFMH)]. These criteria shall be included in specific International Standards when prepared or revised in the future. A validated batch of media is one which has shown satisfactory performance. The strain numbers specified in Tables B.1 to B.7 are those from the catalogue of universal strain identifiers, containing details of the reference strains represented by each WDCM number and contact details of the culture collections, compiled by the World Data Centre for Microorganisms (WDCM) (see Reference [16]). All cited media are described within International Standards.

If strain variability is encountered, investigate the effect of the culture medium (e.g. by obtaining the same medium from a different manufacturer) and obtain a further reference culture from the culture collection in which it was originally deposited. Users are requested to feed relevant information on strain variability back to WG 5, *Culture media*, of ISO/TC 34/SC 9 through the secretariat of ISO/TC 34/SC 9.

Information on performance testing already published in International Standards has not been included in Tables B.1 to B.7.

Table B.1 — Selective media for enumeration of microorganisms

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions
Baird - Parker	S <sup>a</sup>	Coagulase-positive staphylococci	ISO 6888-1	Productivity	24 h to 48 h at 37 °C	<i>Staphylococcus aureus</i> WDCM 00032 <i>Staph. aureus</i> WDCM 00034 <sup>b</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Black or grey colonies with clear halo (egg yolk clearing reaction)
				Selectivity	48 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total inhibition	
				Specificity	24 h to 48 h at 37 °C	<i>Staphylococcus epidermidis</i> WDCM 00036 or <i>S. saprophyticus</i> WDCM 00159 <sup>b</sup>		Qualitative		Black or grey colonies without egg yolk clearing reaction
RPFA	S	Coagulase-positive staphylococci	ISO 6888-2	Productivity	24 h to 48 h at 37 °C	<i>Staph. aureus</i> WDCM 00032 <i>Staph. aureus</i> WDCM 00034 <sup>b</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Black or grey colonies with opacity halo
				Selectivity	48 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total inhibition	
				Specificity	24 h to 48 h at 37 °C	<i>Staphylococcus epidermidis</i> WDCM 00036 or <i>S. saprophyticus</i> WDCM 00159 <sup>b</sup>		Qualitative		Black or grey colonies without opacity halo
MRS	S	Lactic acid bacteria	ISO 15214	Productivity	72 h at 30 °C	<i>Lactobacillus sakei</i> WDCM 00015 <sup>b</sup> <i>Pedrococcus peritosaecus</i> WDCM 00158 <i>Lactococcus lactis</i> WDCM 00016 <sup>b</sup>	Media batch MRS already validated	Quantitative	Minimum PR <sup>c</sup> value: 0,7	Characteristic colonies according to each species
				Selectivity	72 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total inhibition	
						<i>Bacillus cereus</i> WDCM 00001				
MYP	S	<i>Bacillus cereus</i>	ISO 7932	Productivity	24 h to 48 h at 30 °C	<i>B. cereus</i> WDCM 00001 <sup>a</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Pink colonies with precipitation halo
				Selectivity	48 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total inhibition	
				Specificity	48 h at 30 °C	<i>Bacillus subtilis</i> WDCM 00003 <sup>b</sup>				Yellow colonies without precipitation halo
Agar <i>Listeria</i> according to Ottaviani and Agosti	S	<i>Listeria monocytogenes</i>	ISO 11290 (all parts)	Productivity	48 h at 37 °C	<i>L. monocytogenes</i> 1/2a WDCM 00020 <i>L. monocytogenes</i> 4b WDCM 00021 <sup>b</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Blue green colonies with opaque halo
				Selectivity	48 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>Enterococcus faecalis</i> WDCM 00087 or <i>E. faecalis</i> WDCM 00009 <sup>b</sup>		Qualitative	Total inhibition	
				Specificity	48 h at 37 °C	<i>Listeria innocua</i> WDCM 00017		Qualitative		Blue green colonies without opaque halo

Table B.1 (continued)

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions
TS(C)	S	<i>Clostridium perfringens</i>	ISO 7937	Productivity	20 h at 37 °C anaerobic atm.	<i>C. perfringens</i> WDCM 00007 <sup>b</sup> <i>C. perfringens</i> WDCM 00080	Media batch TS(C) already validated	Quantitative	Minimum PR <sup>c</sup> value: 0,7	Black colonies
				Selectivity TSC	20 h at 37 °C anaerobic atm.	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total inhibition	
TS	S	Sulfite-reducing bacteria	ISO 15213	Productivity	24 h to 48 h at 37 °C anaerobic atm.	<i>C. perfringens</i> WDCM 00007 <sup>b</sup> <i>C. perfringens</i> WDCM 00080	Media batch TS already validated	Quantitative	Minimum PR <sup>c</sup> value: 0,7	Black colonies
				Selectivity TS		<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	—	White colonies
VRBG	S	Enterobacteriaceae	ISO 21528 (all parts)	Productivity	24 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>Salmonella</i> Typhimurium WDCM 00031	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Pink to red colonies with or without precipitation halo
				Selectivity	24 h at 37 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	Total inhibition	
VRBL	S	Coliforms	ISO 4832	Productivity	24 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Purplish-red colonies with or without precipitation halo
				Selectivity	24 h at 30 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	Total inhibition	
CT-SMAC	S	<i>Escherichia coli</i> O157	ISO 16654	Productivity	24 h at 37 °C	<i>Pseudomonas aeruginosa</i> WDCM 00025 <i>E. coli</i> O 157:H7 WDCM 00014 (non-toxicogenic)	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Transparent colonies with a pale yellowish-brown appearance and a diameter ~1 mm
				Selectivity	24 h at 37 °C	<i>Staph. aureus</i> WDCM 00032 or WDCM 00034 <sup>b</sup> <i>E. coli</i> WDCM 00090 or WDCM 00013 <sup>b</sup>		Qualitative	Total inhibition	
BGBLB	L <sup>d</sup>	Coliforms	ISO 4831	Productivity	24 h to 48 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>Citrobacter freundii</i> WDCM 00006		Qualitative	Turbidity 2 and gas in Durham tube	Gas production and turbidity
				Selectivity	24 h to 48 h at 30 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	Partial inhibition without gas production	

Table B.1 (continued)

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions
LST	L	Coliforms	ISO 4831	Productivity	24 h to 48 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>C. freundii</i> WDCM 00006		Qualitative	Turbidity 2 and gas in Durham tube	Gas production and turbidity
EC	L	<i>E. coli</i>	ISO 7251	Selectivity	24 h to 48 h at 30 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	No growth	
				Productivity	24 h to 48 h at 44 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Turbidity 2 and gas in Durham tube	Gas production and turbidity
				Selectivity	24 h to 48 h at 44 °C	<i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup>		Qualitative	No growth	
TBX	S	$\beta$ -D-Glucuronidase-positive <i>E. coli</i>	ISO 16649 (all parts)	Productivity	24 h at 44 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b,e</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,5	Blue colonies
				Selectivity	24 h at 44 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	Total inhibition	
				Specificity	24 h at 44 °C	<i>Ps. aeruginosa</i> WDCM 00025 or <i>C. freundii</i> WDCM 00006 <sup>b</sup>		Qualitative		White to green-beige colonies

a S = solid medium.  
 b Strains to be used by the end user laboratory (minimum).  
 c PR = productivity ratio.  
 d L = liquid medium.  
 e WDCM 00013 is a strong and WDCM 00012 is a weak  $\beta$ -D-glucuronidase producer.

NOTE For solid culture media, it is also possible to use a semi-quantitative plating method.

Table B.2 — Non selective media for enumeration of microorganisms

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions
PCA	S <sup>a</sup>	Colony count	ISO 4833	Productivity	72 h at 30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>Staph. aureus</i> WDCM 00032 or WDCM 00034 <i>B. subtilis</i> WDCM 00003 <sup>b</sup>	TSA	Quantitative	Minimum PR <sup>c</sup> value: 0,7	

a S = solid medium.  
 b Strains to be used by the end user laboratory (minimum).  
 c PR = productivity ratio.

Table B.3 — Selective enrichment media

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions of target microorganism
EE	L <sup>a</sup>	Enterobacteriaceae	ISO 21528-1	Productivity	24 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> or <i>S. Typhimurium</i> WDCM 00031 + <i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Semi-quantitative	>10 colonies on VRBG	Pink to red colonies with or without precipitation halo
				Selectivity	24 h at 37 °C			Semi-quantitative	Total inhibition	
Half-Fraser	L	<i>L. monocytogenes</i>	ISO 11290-1	Productivity	24 h at 30 °C	<i>L. monocytogenes</i> 1/2a WDCM 00020 or <i>L. monocytogenes</i> 4b WDCM 00021 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Semi-quantitative	>10 colonies on agar <i>Listeria</i> according to Ottaviani and Agosti	Blue green colonies with opaque halo
				Selectivity	24 h at 30 °C			Semi-quantitative	Total inhibition on TSA	
Fraser	L	<i>L. monocytogenes</i>	ISO 11290-1	Productivity	48 h at 37 °C	<i>L. monocytogenes</i> 1/2a WDCM 00020 or <i>L. monocytogenes</i> 4b WDCM 00021 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Semi-quantitative	>10 colonies on agar <i>Listeria</i> according to Ottaviani and Agosti	Blue green colonies with opaque halo
				Selectivity	48 h at 37 °C			Semi-quantitative	Total inhibition on TSA	
ITC	L	<i>Yersinia enterocolitica</i>	ISO 10273	Productivity	48 h at 25 °C	<i>Y. enterocolitica</i> WDCM 00160 or WDCM 00038 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup>		Semi-quantitative	>10 colonies on CIN or SSDC	Characteristic colonies according to each medium (see ISO 10273)
				Selectivity	48 h at 25 °C			Semi-quantitative	Total inhibition on TSA	

Table B.3 (continued)

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions of target microorganism
Bolton broth	L	Campylobacter	ISO 10272-1	Productivity	5 h at 37 °C then 44 h at 41,5 °C	<i>Campylobacter coli</i> WDCM 00004 <sup>b</sup> or <i>Campylobacter jejuni</i> WDCM 00005 or WDCM 00156 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>P. mirabilis</i> WDCM 00023 <sup>b</sup>		Semi-quantitative	>10 colonies on mCCDA	Greyish, flat and moist, sometimes with metallic sheen
PSB	L	<i>Y. enterocolitica</i>	ISO 10273	Selectivity	5 h at 37 °C then 44 h at 41,5 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>P. mirabilis</i> WDCM 00023		Semi-quantitative	Total inhibition on TSA	
MKTTn	L	Salmonella	ISO 6579	Productivity	3 to 5 days at 25 °C	<i>Y. enterocolitica</i> WDCM 00160 or WDCM 00038 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup> + <i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup> + <i>P. mirabilis</i> WDCM 00023		Semi-quantitative	>10 colonies on CIN or SSDC	Characteristic colonies according to each medium (see ISO 10273)
RVS	L	Salmonella	ISO 6579	Selectivity	3 to 5 days at 25 °C	<i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup> + <i>P. mirabilis</i> WDCM 00023		Semi-quantitative	Total inhibition on TSA	
				Productivity	24 h at 37 °C	<i>S. Typhimurium</i> WDCM 00031 or <i>S. Enteritidis</i> WDCM 00030 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup>		Semi-quantitative	>10 colonies on XLD or other medium of choice	Characteristic colonies according to each medium (see ISO 6579)
				Selectivity	24 h at 37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Semi-quantitative	Partial inhibition ≤ 100 colonies on TSA	
				Productivity	24 h at 41,5 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Semi-quantitative	<10 colonies on TSA	
				Selectivity	24 h at 41,5 °C	<i>S. Typhimurium</i> WDCM 00031 or <i>S. Enteritidis</i> WDCM 00030 <sup>b</sup> + <i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> + <i>Ps. aeruginosa</i> WDCM 00025 <sup>b</sup>		Semi-quantitative	>10 colonies on XLD or other medium of choice	Characteristic colonies according to each medium (see ISO 6579)
				Productivity	24 h at 41,5 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Semi-quantitative	Partial inhibition ≤ 100 colonies on TSA	
				Selectivity	24 h at 41,5 °C	<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Semi-quantitative	<10 colonies on TSA	

a L = liquid medium.

b Strains to be used by the end user laboratory (minimum).

Table B.4 — Non selective liquid media

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference media	Method of control	Criteria	Characteristic reactions
BHI	L <sup>a</sup>	Coagulase-positive staphylococci	ISO 6888-1 ISO 6888-3	Productivity	24 h at 37 °C	<i>Staph. aureus</i> WDCM 00034 <sup>b</sup>		Qualitative	Turbidity 1 to 2	
Brucella	L	Campylobacter	ISO 10272 (all parts)	Productivity	2 to 5 days at 25 °C	<i>C. coli</i> WDCM 0004 <sup>b</sup> or <i>C. jejuni</i> WDCM 00005 or WDCM 00156 <sup>b</sup>		Qualitative	Turbidity 1 to 2	
Peptone-salt	L	Dilution liquids	ISO 6887 (all parts)	Diluent	45 min at 20 °C to 25 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup> <i>Staph. aureus</i> WDCM 00034	TSA	Quantitative	±50 % colonies/T <sub>0</sub> (±50 % of original count)	
Thioglycollate	L	<i>C. perfringens</i>	ISO 7937	Productivity	24 h at 37 °C	<i>C. perfringens</i> WDCM 00007 <sup>b</sup>		Qualitative	Turbidity 1 to 2	
TSYEB	L	<i>L. monocytogenes</i>	ISO 11290 (all parts)	Productivity	24 h at 25 °C	<i>L. monocytogenes</i> 1/2a WDCM 00020 <i>L. monocytogenes</i> 4b WDCM 00021 <sup>b</sup>		Qualitative	Turbidity 1 to 2	

<sup>a</sup> L = liquid medium.

<sup>b</sup> Strains to be used by the end user laboratory (minimum).

Table B.5 — Selective isolation media

Medium	Type	Microorganisms	Standard	Function	Incubation	Control strains (see Reference [16])	Reference medium	Method of control	Criteria	Characteristic reactions
mCCDA	S <sup>a</sup>	Campylobacter	ISO 10272 (all parts)	Productivity	44 h/41,5 °C	<i>C. coli</i> WDCM 00004 <sup>b</sup> or <i>C. jejuni</i> WDCM 00005 or WDCM 00156 <sup>b</sup>		Qualitative	Good growth (2)	Greyish, flat and moist, sometimes with metallic sheen
				Selectivity	44 h/41,5 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total or partial inhibition (0 – 1)	No characteristic colonies
						<i>Staph. aureus</i> WDCM 00034		Qualitative	Total inhibition (0)	
CIN	S	<i>Y. enterocolitica</i>	ISO 10273	Productivity	24 h/30 °C	<i>Y. enterocolitica</i> WDCM 00160 or WDCM 00038 <sup>b</sup>		Qualitative	Good growth (2)	Characteristic colonies according to each medium (see ISO 10273)
S5DC				Selectivity	24 h/30 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Total or partial inhibition (0 – 1)	No characteristic colonies
						<i>Staph. aureus</i> WDCM 00034		Qualitative	Total inhibition (0)	
XLD	S	Salmonella	ISO 6579	Productivity	24 h/37 °C	<i>S. Typhimurium</i> WDCM 00031 <sup>b</sup> <i>S. Enteritidis</i> WDCM 00030		Qualitative	Good growth (2)	Colonies with black centre and a lightly transparent zone of reddish colour due to the colour change of the medium
				Selectivity	24 h/37 °C	<i>E. coli</i> WDCM 00013 or WDCM 00012 <sup>b</sup>		Qualitative	Growth or partial inhibition (0 – 1)	Yellow colonies
						<i>E. faecalis</i> WDCM 00087 or WDCM 00009 <sup>b</sup>		Qualitative	Total inhibition (0)	

<sup>a</sup> S = solid medium.

<sup>b</sup> Strains to be used by the end user laboratory (minimum).