# OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

# VIOLET RED BILE GLUCOSE AGAR

#### CM0485

# **Typical Formula\***

Yeast extract	grams per litre	3.0
Peptone		7.0
Sodium chloride		5.0
Bile salts No.3		1.5
Glucose		10.0
Neutral red		0.03
Crystal violet		0.002
Agar		12.0

\* adjusted as required to meet performance standards

### Directions

Suspend 38.5g in 1 litre of distilled water. With frequent agitation, bring to the boil to dissolve completely. Cool to 50°C. Mix well and pour into sterile Petri dishes or hold at 45°C when using the pour plate technique. DO NOT AUTOCLAVE.

## **Physical Characteristics**

Straw/pink, free-flowing powder Colour on reconstitution - purple Moisture level - less than 7% pH 7.4  $\pm$  0.2 at 25°C Clarity - clear Gel strength - firm, comparable to 12.0g/litre of agar

## Microbiological Tests Using Optimum Inoculum Dilution

Control Medium: Tryptone Soya Agar

## Reactions after incubation at 37°C for 24 hours

Inoculation using pour plate technique

Medium is challenged with 50-150 colony-forming units

Klebsiella pneumoniae	ATCC® 29665	1-2mm purple/pink colonies and halo
Proteus mirabilis	ATCC® 12453	Pinpoint-1mm purple/pink colonies with/without halo

A satisfactory result for pour plate technique is represented by recovery of positive strains equal to or greater than 50% of the control medium.

There shall be no gassing in the medium.

Inoculation using surface plate technique

Medium is challenged with 10-100 colony-forming units

Shigella sonnei	ATCC® 25931	1-3mm irregular purple/pink colonies and halo
Enterobacter aerogenes	ATCC® 13048	1-4mm purple/pink mucoid colonies and halo
Pseudomonas aeruginosa	ATCC® 9027	1-3mm straw colonies, no halo

A satisfactory result for surface plate technique is represented by recovery of positive strains equal to or greater than 50% of the control medium.

Medium is challenged with 1E+04 to 1E+06 colony-forming units

ATCC® 6538 No growth *Staphylococcus aureus* 

Negative strains are inhibited.

Medium is challenged with 1E+04 to 1E+06 colony-forming units

Proteus mirabilis 0.5-2mm purple/pink colonies, no swarming ATCC® 12453

### Testing performed in accordance with ISO11133:2014

### Reactions after incubation at $37 \pm 2^{\circ}$ C for $24 \pm 2$ hours

Inoculation using pour plate technique

Medium is challenged with 50-100 colony-forming units

Escherichia coli	ATCC® 8739	WDCM00012	1-2mm pur	ple/pink colonies and halo	С
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Medium is challenged with 50-120 colony-forming units

Escherichia coli	ATCC® 25922	WDCM00013	1-2mm purple/pink colonies and halo
Salmonella typhimurium	ATCC® 14028	WDCM00031	0.5-2mm purple/pink colonies with/without halo
Salmonella enteritidis	ATCC® 13076	WDCM00030	0.5-2mm purple/pink colonies with/without halo

A satisfactory result for pour plate technique is represented by recovery of positive strains equal to or greater than 50% of the control medium. There shall be no gassing in the medium.

Inoculation using surface plate technique

Medium is challenged with 1E+04 to 1E+06 colony-forming units

Enterococcus faecalis	ATCC® 29212	WDCM00087	No growth
Enterococcus faecalis	ATCC® 19433	WDCM00009	No growth

Negative strains are inhibited.