

## QUALITY CONTROL CERTIFICATE

**PRODUCT:** VIOLET RED BILE WITH LACTOSE AGAR (VRBL) (ISO 4832)

**CAT N°:** 1093

**BATCH:** 604131

**RE-TEST DATE:** 2020/04

**QC Date:** 2016/04/13

**pH:** 7.30

We hereby certify that the above mentioned culture medium has been approved by the Quality Control Laboratory.

### FORMULA IN g/l:

Lactose.....	10.0	Bile Salts : .....	1.5
Gelatin Peptone.....	7.0	Neutral Red.....	0.03
Sodium Chloride: .....	5.0	Crystal Violet.....	0.002
Yeast Extract: .....	3.0	Bacteriological Agar .....	15.0

The pH after preparing the medium and at room temperature:  $7.4 \pm 0.2$

### PHYSICAL AND CHEMICAL TEST

Appearance: ..... fine powder

Solubility: ..... w/o rests

Color:..... beige reddish

Color of the prepared medium: purple-red

### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of  $35 \pm 2^\circ\text{C}$  and observed after 18-24 hours\*.

Microorganisms	Growth	Colony Color	Inoculum (cfu/ml)	Recovery rate (%)
<i>Escherichia coli</i> ATCC 25922	Good	Purple	$10^3 - 10^5$	$\geq 30$
<i>Enterobacter aerogenes</i> ATCC 13048	Good	Purple	$10^3 - 10^5$	$\geq 30$
<i>Salmonella gallinarum</i> NCTC 9240	Good	Colorless	$10^3 - 10^5$	$\geq 30$
<i>Staphylococcus aureus</i> ATCC 6538	Inhibited		$> 10^5$	$\leq 0.01$
<i>Enterococcus faecalis</i> ATCC 29212	Inhibited			
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good	Colorless-Beige	$10^2$	$\geq 80$

\*According to ISO 4832. Incubation at 30 or 37°C and observed after  $24 \pm 2$  h

**According to ISO 11133** ( $24 \pm 2$ h/ $30 \pm 1^\circ\text{C}$ ) Productivity, Selectivity and Specificity

Microorganisms	Inoculum (cfu/ml)	Reference media (cfu)	Media test (cfu)	Productivity Quantitative	Characteristic Reaction	Specificity Qualitative	Selectivity Qualitative
<i>Escherichia coli</i> ATCC 25922	$10^2$	60	40	66%	Red colonies w/w/o precipitation halo		
<i>Escherichia coli</i> ATCC 8739	$10^2$	45	25	55%	Red colonies w/w/o precipitation halo		
<i>Enterococcus faecalis</i> ATCC 29212	$10^4 / 10^6$						Inhibited Total
<i>Enterococcus faecalis</i> ATCC 19433	$10^4 / 10^6$						Inhibited Total
<i>Pseudomonas aeruginosa</i> ATCC 27853	$10^3 / 10^4$					Colorless-beige colonies	

Reference Media Productivity TSA (E.coli)

**Laboratory result: Satisfactory**

Carmen Ramirez, QC Manager

