	Document Owner Department: QC	BT-SPEC-0152
		Page 1 of 4
OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
S.I.M. MEDIUM CM0435		

## S.I.M. MEDIUM

CM0435

### Typical Formula\*

Tryptone	grams per litre	20.0
Peptone		6.1
Ferrous ammonium sulphate		0.2
Sodium thiosulphate		0.2
Agar		3.5

\* adjusted as required to meet performance standards

### Directions

Suspend 30g in 1 litre of distilled water and boil to dissolve the medium completely. Dispense into final containers and sterilize by autoclaving at 121°C for 15 minutes.

### Physical Characteristics

Straw, free-flowing powder  
 Colour on reconstitution – straw/green  
 Moisture level - less than or equal to 7%  
 pH 7.3 ± 0.2 at 25°C  
 Clarity - clear  
 Gel strength - semi-solid, comparable to 3.5g/litre of agar


### Microbiological Tests Using Optimum Inoculum Dilution

Inoculation using stab technique

### Reactions after incubation at 37°C for 18 hours

		Motility	H <sub>2</sub> S	Indole
<i>Escherichia coli</i>	ATCC®11775	+	-	+
<i>Escherichia coli</i>	ATCC®25922	+	-	+
<i>Proteus hauseri</i>	ATCC®13315	+	+	+
<i>Shigella flexneri</i>	ATCC®12022	-	-	-
<i>Shigella sonnei</i>	ATCC®25931	-	-	-
<i>Salmonella typhimurium</i>	ATCC®14028	+	+	-

Additional challenging strains are employed.

	Document Owner Department: QC	BT-SPEC-0152
		Page 2 of 4
OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
S.I.M. MEDIUM CM0435		

**Key to reactions:**

**Motility**

Motility +ve    spreading from the line of inoculum, turbidity of the whole medium or localised outgrowth which is usually fan-shaped

Motility -ve    no spreading from the line of inoculum

**Hydrogen sulphide (H<sub>2</sub>S)**

H<sub>2</sub>S +ve        blackening


H<sub>2</sub>S -ve        no blackening

**Indole production**

Add a few drops of Kovacs' reagent after incubation

Indole +ve     pink layer

Indole -ve     no colour change

	Document Owner Department: QC	BT-SPEC-0152
		Page 3 of 4
OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
S.I.M. MEDIUM CM0435		

Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire document	Update to new format and correction of typographical/minor errors	Change control	BT-CC-2263
Microbiological characteristics	Clarity of results criteria.	Change control	BT-CC-1927
Physical characteristics	Addition of colour on reconstitution		