


| | | |
|---|-------------------------------|------------------|
|  | Document Owner Department: QC | MBD-BT-SPEC-0210 |
| | | Page 1 of 3 |
| OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION | | |
| SHEEP BLOOD AGAR BASE (CM0854) | | |

SHEEP BLOOD AGAR BASE

CM0854

Typical Formula*

| | | |
|-----------------|-----------------|------|
| Tryptone | grams per litre | 14.0 |
| Peptone | | 4.5 |
| Yeast extract | | 4.5 |
| Sodium chloride | | 5.0 |
| Agar | | 12.5 |

* adjusted as required to meet performance standards

Directions

Suspend 40g in 1 litre of distilled water. Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 50°C and aseptically add 7% v/v Sheep Blood (SR0051). Mix well and pour into sterile Petri dishes.

Physical Characteristics

Straw, free-flowing powder
 Colour on reconstitution - straw 2-3
 Moisture level - less than or equal to 7%
 pH 7.3 ± 0.2 at 25°C
 Clarity - clear
 Gel strength - firm, comparable to 12.5g/litre of agar

The medium is tested for compatibility using 7% v/v oxalated horse blood, defibrinated horse blood or defibrinated sheep blood. There shall be no evidence of lysis or darkening, after incubation at 37°C, 25°C and 4°C for 72 hours.

Microbiological Tests Using Optimum Inoculum Dilution


Control Medium: Sheep Blood Agar Base

Reactions after incubation at 37°C for 18 hours

Medium is challenged with 10-100 colony-forming units

Plain plates

| | | |
|---------------------------------|-------------|------------------------------------|
| <i>Streptococcus pneumoniae</i> | ATCC® 6303 | Pinpoint-1mm colourless colonies |
| <i>Streptococcus viridans</i> | NCTC1080 | 0.25-0.5mm colourless colonies |
| <i>Streptococcus pyogenes</i> | ATCC® 19615 | 0.25-1mm colourless/white colonies |
| <i>Staphylococcus aureus</i> | ATCC® 25923 | 1-2mm white/straw colonies |

| | | |
|---|-------------------------------|------------------|
|  | Document Owner Department: QC | MBD-BT-SPEC-0210 |
| | | Page 2 of 3 |
| OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION | | |
| SHEEP BLOOD AGAR BASE (CM0854) | | |

Pseudomonas aeruginosa ATCC®27853 2-3mm straw colonies, green pigmentation

Enriched with 7% v/v sheep blood

Streptococcus pneumoniae ATCC®6303 0.5-2mm colourless colonies, α haemolysis
Streptococcus viridans NCTC1080 0.5-1mm grey/green colonies, α haemolysis
Haemophilus influenzae ATCC®19418 Pinpoint-0.25mm white/grey colonies

A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium.

Zones of growth/no growth surrounding X, V and X+V factor discs (DD0003, DD0004 and DD0005) when plain plates are inoculated with the following organisms and incubated at 37°C for 18 hours:

| | | X | V | X+V |
|-----------------------------------|------------|----------|----------|------------|
| <i>Haemophilus influenzae</i> | ATCC®9344 | 0 | 0 | ≥ 15mm |
| <i>Haemophilus influenzae</i> | ATCC®19418 | 0 | 0 | ≥ 15mm |
| <i>Haemophilus influenzae</i> | ATCC®49247 | 0 | 0 | ≥ 15mm |
| <i>Haemophilus parainfluenzae</i> | ATCC®33392 | 0 | ≥ 20mm | ≥ 20mm |

Zones of inhibition with Bacitracin discs (DD0002) shall be 10-20mm when 7% v/v horse blood plates are inoculated with *Streptococcus pyogenes* ATCC®19615 and incubated at 37°C for 18 hours.

Additional challenging strains are employed.

Testing performed in accordance with current CLSI M22 A


Reactions after incubation at 35°C for 18-24 hours

Enriched with 7% v/v sheep blood

Medium is challenged with 10-100 colony-forming units

Streptococcus pneumoniae ATCC®6305 0.5-2mm colourless colonies, α haemolysis
Streptococcus pyogenes ATCC®19615 0.5-1mm colourless/white colonies, β haemolysis
Staphylococcus aureus ATCC®25923 1-2mm white/straw colonies
Escherichia coli ATCC®25922 1-2mm cream colonies

A satisfactory result is represented by recovery of equal to or greater than 70% of the control medium.

| | | |
|---|-------------------------------|------------------|
|  | Document Owner Department: QC | MBD-BT-SPEC-0210 |
| | | Page 3 of 3 |
| OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION | | |
| SHEEP BLOOD AGAR BASE (CM0854) | | |

Revision History

| Section / Step | Description of Change | Reason for Change | Reference |
|---|---|-------------------|---------------|
| Entire Document | Correction of typographical/minor errors. | Change control | MOC-2022-0377 |
| Microbiological Characteristics CLSI | Change typographical error of ATCC strains to harmonise with certificate for <i>Streptococcus pneumoniae</i> and <i>E. coli</i> . <i>S. pneumoniae</i> : Change ATCC6303 to 6305 <i>E. coli</i> : Change ATCC29212 to 25922 | | |