

**PRODUCT :**

**DM2520500 Esculin Agar**

Esculin Agar is a differential medium for demonstrating esculin hydrolysis by various microorganism

**COMPOSITION**

<u>Ingredients</u>	<u>Gms / Litre</u>	<u>Ingredients</u>	<u>Gms / Litre</u>
Casein enzymic hydrolysate .....	13.000	Esculin .....	1.000
Sodium chloride .....	5.000	Ferric citrate.....	0.500
Yeast extract.....	5.000	Agar .....	15.000
Beef heart infusion (solids) .....	2.000	Final pH ( at 25°C).....	7.3 ± 0.2

\*\*Formula adjusted, standardized to suit performance parameters

**OPERATION**

Suspend 41.50 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Distribute into screw-capped tubes in 3 ml volumes or as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool tubes in a slanted position.

**QUALITY CONTROL**

**Description:** Cream to yellow homogeneous free flowing powder

**Colour and Clarity of prepared medium:** 4.15% w/v aqueous solution is amber coloured, clear to slightly opalescent gel forms in tubes as slants

**Reaction:** Reaction of 4.15% w/v aqueous solution at 25°C. pH: 7.3 ± 0.2

Prepare the medium per label directions. Inoculate and incubate at 35 ± 2°C for 18-24 hours.

<u>Microorganisms</u>	<u>Growth</u>	<u>Esculin Hydrolysis</u>
<i>Escherichia coli</i> (ATCC 25922)	good	-
<i>Enterococcus faecalis</i> (ATCC 29212)	luxuriant	+
<i>Streptococcus pyogenes</i> (ATCC 19615)	luxuriant	-

Key: + = +ve reaction blackening of medium  
 - = -ve no colour change

**STORAGE AND SHELF LIFE**

Store below 30°C and the prepared medium at 2-8°C. Use before expiry date on label.

## **TECHNICAL REFERENCES**