B1420	BLOOD AGAR BASE NO.2
Formula:	**Gms /lit.**
Ingredients :	
Proteose peptone	15.00
Liver extract	2.50
Yeast extract	5.00
Sodium chloride	5.00
Agar	15.00
Final pH (at 25°C) : 7.4 ± 0.1	

Directions :

Suspend 42.5 gms. In 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121° C) for 15 minutes. Cool to 45 – 50° C and aseptically add 5-7 % sterile defribinated blood.

Principle :

Liver extract and yeast extract helps enhance the growth and haemolytic reactions of fastidious organisms like Streptococci and Pneumococci. Proteose peptone serves as the nitrogen source while liver extract and yeast extract provide essential carbon, vitamin, nitrogen and amino acid sources. Sodium chloride maintains the osmotic equilibrium Agar as a solidifying agent. Supplementation with blood (5-10%) provides additional growth factors and also serves as basis for determining haemolytic reactions. Haemolytic patterns may vary with the source of animal blood or type of base medium used.

QC Tests – (I)Dehydrated Medium

	Colour :	Cream to yellow
	Appearance :	Homogeneous Free Flowing powder

(II)Rehydrated medium

	pH (post autoclaving/heating) :	7.4 ± 0.1
	Colour (post autoclaving/heating) :	A) Basal medium : Light amber B) After addition of 7% sterile defibrinated blood: Cherry red.
	Clarity (post autoclaving/heating) :	A : Clear to slightly opalescent B : Opaque

(III)Q.C. Test Microbiological

Cultural characteristics observed after 18-48 hrs. At 35-37°C.

	MICROORGANISM (ATCC)	**GROWTH W/O BLOOD**	**GROWTH W/ BLOOD**	**HAEMOLYSIS**
	Neisseria meningitidis (13090)	Fair	Luxuriant	none
	Staphylococcus aureus (25923)	Good	Luxuriant	beta
	Staphylococcus pneumoniae (6303)	Fair to good	Luxuriant	alpha
	Streptococcus pyogenes (19615)	Fair to good	Luxuriant	beta

Refer disclaimer Overleaf

REV: JANUARY 2025

Precautions :	1. For Laboratory Use.				
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
Limitations :	1. Addition of sheep blood is recommended to detect haemolysis. This medium does not support the growth of H.haemolyticus				
	2. Addition of Horse blood or rabbit blood to base medium supports growth of H.haemolyticus but resembles beta- haemolytic Streptococci and hence must be confirmed.				
	3. Haemolytic pattern varies with the source of blood used.				
Use:	After addition of blood, medium permits maximum recovery of Streptococci, Pneumococci and other fastidious pathogenic microorganisms without interfering with their haemolytic reactions.				
Storage:	Dehydrated medium-below 30°C Prepared medium- Between 2 to 8°C.				
Packing:	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation(500g)	pH (25°C)	Supplement	Sterilization
B1420	42.5g/l	11.764 L	7.4 $\pm$ 0.1	5-7% sterile defribinated blood	121^0C / 15 minutes